## **Kriptanalisis pada Cipher Abjad-Tunggal**

Sumber: <https://theory.stanford.edu/~gdurf/durfee-thesis-phd.pdf> (Introduction)

CRYPTOLOGYISTHESTUDYOFSECRETCODESINSPEAKINGOFCRYPTOLOGYWEDISCUSSTWOMAINBRANCHESCRYPTOGRAPHYISCONCERNEDWITHTHEWRITINGOFMESSAGESINSECRETCODEANDTHECREATIONOFTHESEMETHODSWHILECRYPTANALYSISISCONCERNEDWITHREADINGENCRYPTEDMESSAGESBYBREAKINGSECRETCODESANCIENTTIMESSAWMANYEXAMPLESOFCRYPTOGRAPHYOVERTHREETHOUSANDYEARSAGOEGYPTIANSCRIBESMADEUSEOFHIEROGLYPHICTRANSFORMATIONSTOOBSCURETHEMEANINGOFWRITTENMESSAGESMESOPOTAMIANANDBABYLONIANSCRIBESEMPLOYEDSIMILARTECHNIQUESTORENDERCUNEIFORMTABLETSUNREADABLETOTHEUNINITIATEDTHEGREEKSEMPLOYEDCRYPTOGRAPHYANDTHECLOSELYRELATEDSTEGANOGRAPHYWHICHISCONCERNEDWITHCONCEALINGTHEEXISTENCEOFCOMMUNICATIONRATHERTHANCONTENTFORMILITARYANDTACTICALPURPOSESEVENTHEKAMASUTRAOFANCIENTINDIATOUCHESONCRYPTOGRAPHYLISTINGSECRETWRITINGASONEOFTHESIXTYFOURFUNDAMENTALARTSHUNDREDSOFOTHEREXAMPLESOCCURINANCIENTCIVILIZATIONSINSHORTCRYPTOGRAPHYHASAPPEAREDMOREORLESSSPONTANEOUSLYINEVERYCULTUREINWHICHLITERACYHASBECOMEWIDESPREADCRYPTANALYSISONTHEOTHERHANDTOOKCONSIDERABLYLONGERTODEVELOPASARIGOROUSSUBJECTOFSTUDYTHEEARLIESTSURVIVINGDESCRIPTIONSOFSYSTEMATICMETHODSOFCODEBREAKINGCOMEFROMFIFTEENTHCENTURYINTHEARABICENCYCLOPEDIASUBHALASHAITGIVESTHEFIRSTKNOWNWRITTENDESCRIPTIONOFTHETECHNIQUEOFFREQUENCYANALYSISWHERETHEFREQUENCIESOFLETTERSANDLETTERGROUPINGSOFALANGUAGEAREUSEDTOUNRAVELSECRETCODESCRYPTOLOGYHASPLAYEDAROLEINPOLITICALANDMILITARYMATTERSFROMMEDIEVALTIMESTHROUGHTHECENTURYPERHAPSMOSTFAMOUSISTHECRYPTOLOGICEFFORTOFGREATBRITAINANDTHEUNITEDSTATESDURINGWORLDWARIITHEEFFORTSOFTHIRTYTHOUSANDEMPLOYEESATBRITAINSBLETCHLEYPARKINCRYPTANALYZINGGERMANYSENIGMATRANSMISSIONSISSAIDTOHAVESHORTENEDTHEWARBYSEVERALYEARSANDITLEDTOTHEDEVELOPMENTOFTHEFIRSTDIGITALCOMPUTERCOLOSSUSSIMILAREFFORTSINTHEUNITEDSTATESTOBREAKJAPANESECODESAIDEDAMERICANINTELLIGENCEINTHEWARCONVINCINGAMERICANAUTHORITIESOFTHEIMPORTANCEOFCRYPTOLOGICEXPERTISEANDEVENTUALLYLEADINGTOTHEESTABLISHMENTOFTHENATIONALSECURITYAGENCYINWITHTHERISEOFDIGITALCOMPUTERNETWORKSINTHESECURINGCOMMUNICATIONBECAMEANINCREASINGLYIMPORTANTTASKINTHEPRIVATESECTORASWELLTHENEEDSOFTHEBANKINGINDUSTRYINPARTICULARFORSECUREDIGITALCOMMUNICATIONBECAMEESPECIALLYURGENTDEVELOPMENTSATIBMLEDTOTHEDESIGNOFLUCIFERONEOFTHEFIRSTPUBLICCIPHERSFORCOMPUTERCOMMUNICATIONSTHENATIONALSECURITYAGENCYOFFEREDSEVERALIMPROVEMENTSTOLUCIFERANDINTHENATIONALBUREAUOFSTANDARDSPRESENTEDTHEMODIFIEDVERSIONASTHEDATAENCRYPTIONSTANDARDORDESTHUSTHEFIRSTPUBLICSTANDARDFORENCRYPTIONBEGANTOGAINWIDESPREADUSEAMETHODOFSECURINGCOMMUNICATIONISCALLEDACRYPTOSYSTEMTHESENDERENCRYPTSORENCIPHERSAMESSAGEUSINGANENCRYPTIONALGORITHMTOGETHERWITHASECRETKEYTHISPRODUCESACIPHERTEXTWHICHISSENTTOTHERECIPIENTTHERECIPIENTWHOALSOPOSSESSESAKEYRECEIVESTHECIPHERTEXTANDDECRYPTSORDECIPHERSUSINGTHEKEYTORECOVERTHEORIGINALMESSAGECALLEDTHEPLAINTEXTINTHEHISTORYOFCRYPTOLOGYUPTOALLCRYPTOSYSTEMSREQUIREDTHESENDERANDTHERECEIVERTOAGREEBEFOREHANDONTHESAMEKEYAKEYTHATHADTOBERIGOROUSLYPROTECTEDFROMEXPOSURETOANADVERSARYTHISISKNOWNASSYMMETRICORSECRETKEYCRYPTOGRAPHYARRANGINGTOSHAREASECRETKEYBETWEENTWOPARTIESISOFTENADIFFICULTPROBLEMANDDOESNOTSCALEWELLTOSCENARIOSINWHICHMANYINDIVIDUALSORCOMPUTERSMIGHTCOMMUNICATEWITHEACHOTHERINMARTINHELLMANAPROFESSORATSTANFORDUNIVERSITYANDWHITFIELDDIFFIEAGRADUATESTUDENTINTRODUCEDTHECONCEPTOFASYMMETRICORPUBLICKEYCRYPTOGRAPHYINTHEIRSEMINALPAPERNEWDIRECTIONSINCRYPTOGRAPHYTHEYSPECULATEDTHATAMETHODOFENCRYPTIONMIGHTEXISTINWHERETHEENCRYPTIONKEYDIFFEREDFROMTHEDECRYPTIONKEYINSUCHASCHEMEAUSERSENCRYPTIONKEYCOULDBEANNOUNCEDTOTHEPUBLICANYOUTSIDERCOULDOBTAINTHISPUBLICENCRYPTIONKEYANDUSEITTOSENDENCRYPTEDMESSAGESTOTHEUSERSINCEONLYTHEUSERWOULDPOSSESTHEDECRYPTIONKEYONLYSHECOULDOBTAINTHEDECRYPTIONOFTHEMESSAGEPUBLICKEYCRYPTOGRAPHYALSOOPENEDDOORSFORMANYOTHERAPPLICATIONSSUCHASDIGITALSIGNATURESANDELECTRONICCASHTHECONCEPTOFPUBLICKEYCRYPTOGRAPHYCIRCULATEDINTHERESEARCHCOMMUNITYFORSOMETIMEBEFORETHEFIRSTPRACTICALPROPOSALFORSUCHASCHEMEWASMADEINAUGUSTTHERSAPUBLICKEYCRYPTOSYSTEMNAMEDAFTERINVENTORSRONRIVESTADISHAMIRANDLENADLEMANWASINTRODUCEDINMARTINGARDNERSCOLUMNONMATHEMATICALGAMESINSCIENTIFICAMERICANTHERSACRYPTOSYSTEMOUTLINEDINSECTIONHASSURVIVEDOVERTWENTYYEARSOFSTUDYBYCRYPTANALYSTSINTHEPUBLICSECTORANDITISTHEMOSTWIDELYUSEDPUBLICKEYCRYPTOSYSTEMINTHEWORLDITISUSEDAMONGOTHERPLACESINTHESETPROTOCOLFORSECURECREDITCARDTRANSACTIONSANDTHESSLPROTOCOLFORSECURECOMMUNICATIONONTHEINTERNETPUBLICDISCUSSIONANDRESEARCHINCRYPTOGRAPHYINBUSINESSANDACADEMIASTARTEDINTHELASTQUARTEROFTHE20THCENTURYANDCONTINUESATAFURIOUSRATENEWMETHODSFORENCRYPTIONAREPUBLICLYANNOUNCEDRESEARCHERSTHENSTUDYTHESEMETHODSFORWEAKNESSESBYAPPLYINGTHETOOLSOFCRYPTANALYSIS2ONLYAFTERINTENSEPUBLICSCRUTINYDOESANEWCRYPTOSYSTEMGAINASENSEOFLEGITIMACYSTUDYINGANDUSINGMETHODSFORBREAKINGCRYPTOSYSTEMSISANESSENTIALSTEPINTHEDEVELOPMENTOFNEWDESIGNSFORMORESECURECRYPTOSYSTEMSBYLEARNINGHOWTHINGSBREAKWELEARNHOWTOMAKETHEMSTRONGERITISINTHISSPIRITTHATTHISTHESISISWRITTENTHISWORKUSESMATHEMATICALTOOLSTOSTUDYTHERSAPUBLICKEYCRYPTOSYSTEMANDSEVERALVARIANTSWEUSETOOLSFROMNUMERICALALGEBRAANDTHEGEOMETRYOFNUMBERSTOGETOURRESULTSALGEBRAICCRYPTANALYSISHASPROVENTOBEONEOFTHEMOSTEFFECTIVEMETHODSINTHESTUDYOFPUBLICKEYCRYPTOSYSTEMS

Kunci:

YKXCEGOZLJIWPFRVQBAHUNTDMS

## **Metode Kasiski**

Sumber plain teks: <https://www.itb.ac.id/history>

Plain teks:

THEHISTORYOFENGINEERINGUNIVERSITYININDONESIADATESBACKTOTHETHCENTURYWHENTHEDUTCHCOLONIALGOVERNMENTESTABLISHEDDETECHNISCHEHOOGESCHOOLTEBANDUNGTHSONJULYONAHECTAREPLOTOFLANDINBANDUNGATTHATTIMETHEREWASONLYONEFACULTYDEFACULTEITVANTECHNISCHEWETENSCHAPANDONLYONEMAJORNAMELYDEAFDEELINGDERWEGENWATERBOUWTHEESTABLISHMENTOFTHISENGINEERINGSCHOOLWASTOFULFILLTHENEEDSOFTECHNICALPERSONNELORENGINEERSDUETOTHEOUTBREAKOFTHEFIRSTWORLDWARTHEFIRSTACADEMICYEAROFTHBANDUNGWASUNIQUEBECAUSETHBANDUNGONLYGOTSTUDENTSANDTWOOFTHEMAREINDONESIANMEANWHILETHEREWEREPROFESSORSATTHEBEGINNINGOFFOURYEARSLATERONTWELVESTUDENTSGRADUATEDFROMTHBANDUNGTHBANDUNGWASABIJZONDERESCHOOLWHICHLATERCHANGEDITSSTATUSASASTATEOWNEDCAMPUSONJULYTHETHANNIVERSARYOFTHBANDUNGSTUDENTSGRADUATEDASENGINEERSANDOFTHEMAREINDONESIANTHATMOMENTISREMARKEDASTHEFIRSTTIMEINDONESIANENGINEERSHAVEGRADUATEDFROMTHBANDUNGOURFOUNDINGFATHERIRSOEKARNOWASONEOFTHEGRADUATESLATERHEBECAMETHEFIRSTPRESIDENTOFTHEREPUBLICOFINDONESIADURINGTHEJAPANESEOCCUPATIONINTHCHANGEDITSNAMETOBANDUNGKOGYODAIGAKUBKDANDBECAMEBANDUNGTECHNICALCOLLEGESEKOLAHTINGGITEKNIKBANDUNGAFTERINDONESIASINDEPENDENCEFURTHERMOREINSTTBANDUNGHADMOVEDTOYOGYAKARTAASSTTBANDUNGINJOGJAWHICHLATERBECAMEGADJAHMADAUNIVERSITYUGMONJUNESTTBANDUNGCHANGEDITSNAMEINTOUNIVERSITEITVANINDONESIEUNDERTHECONTROLOFNICAWITHFACULTEITVANTECHNISCHEWETENSCHAPANDFACULTEITVANEXACTEWETENSCHAPWHICHWEREESTABLISHEDLATERAFTERALONGSTORYINUNIVERSITEITVANINDONESIEJOINEDUNIVERSITYOFINDONESIAASFACULTYOFENGINEERINGANDFACULTYOFNATURALSCIENCESENCOURAGEDBYIDEASANDBELIEFSBASEDONINDONESIANSSTRUGGLETOGETINDEPENDENCEANDOURBRIGHTFUTURETHEINDONESIANGOVERNMENTINAUGURATEDTHEESTABLISHMENTOFBANDUNGINSTITUTEOFTECHNOLOGYONMARCHINCONTRASTTOTHEFIVEPREVIOUSENGINEERINGSCHOOLONTHESAMECAMPUSINSTITUTTEKNOLOGIBANDUNGWASBORNINANATMOSPHEREFULLOFDYNAMICSCARRYINGTHEMISSIONOFDEVOTIONTOSCIENCEANDTECHNOLOGYANDBUILDINGADEVELOPEDGENERATIONFORTHEFUTUREDURINGTHEFIRSTDECADEOFTHEITBBEGANTOFOSTERUPANDDEVELOPITSELFWITHTHESTATUTESDURINGTHISPERIODPREPARATIONSWEREMADEREGARDINGTHEEDUCATIONALANDTEACHINGORGANIZATIONSWHILEALSOFULFILLINGTHENUMBEROFTEACHINGSTAFFANDINCREASINGTHEIRSKILLBYASSIGNINGTHEMTOSTUDYABROADDURINGTHESECONDDECADEOFTHEITBWASMUDDLEDWITHDIFFICULTYTHATAROSETOWARDSTHEFIRSTPERIODTHEACADEMICUNITTHATHADBEENFORMEDWASTRANSFORMEDINTOAWORKUNITTHATALSOCONCURRENTLYFUNCTIONSASASOCIOECONOMICUNITTHATISLIMITEDTOBEINGASEMIAUTONOMOUSINSTITUTIONTHELEVELOFACADEMICSWASINCREASINGBUTTHEASSIGNMENTTOSTUDYABROADWASDECREASINGINTERNALFACILITIESANDSTATUTESWEREINCREASINGLYUTILIZEDDURINGTHETHIRDDECADEOFTHEITBSIMPROVEMENTISMARKEDBYTHEMOVEMENTOFTHESTATUTESANDTEACHINGLEARNINGPROCESSTOWARDSAMODERNERATHATWASEQUIPPEDWITHMORECAMPUSFACILITIESTHENUMBEROFGRADUATESINCREASEDANDPOSTGRADUATEPROGRAMSHADALSOBEGUNTOSTARTTHISSITUATIONWASSUPPORTEDBYTHEIMPROVEMENTOFTHECOUNTRYSSOCIOPOLITICALANDECONOMICGROWTHDURINGTHEFOURTHDECADEOFTHETHEENGINEERINGUNIVERSITYTHATPRIORLYONLYHADONEDEPARTMENTNOWOFFERSTWENTYSIXBACHELORPROGRAMDEPARTMENTSINCLUDINGTHEDEPARTMENTOFSOCIOTECHNOLOGYALONGWITHTHIRTYFOURMASTERPROGRAMSANDTHREEDOCTORALSTUDIESTHESEPROGRAMSINCLUDETHEELEMENTSOFSCIENCETECHNOLOGYARTBUSINESSANDHUMANITIESTHISDECADELEDITBTOANEWCENTURYTHATISMARKEDBYTHEEMERGENCEOFBETTERCONCEPTSANDIDEASFORITSDEVELOPMENTPROCESSSOMEOFTHEMINCLUDETHATTHERAPIDGROWTHOFINFORMATIONFLOWINTHENEWCENTURYWILLDEMANDANEDUCATIONTHATISACCELERATEDTIMELYINTEGRATEDSUSTAINABLEANDTHEBESTINVESTMENTEFFORTRELATEDTOTHISITBISWILLINGTOBUILDITSBACHELORPROGRAMONASOLIDFOUNDATIONOFBASICSCIENCEPROFICIENCYSOTHATITSGRADUATESWILLBEABLETOADAPTTORAPIDENVIRONMENTALCHANGESMEANWHILETHEPOSTGRADUATEPROGRAMISTHEPIONEERTOENHANCINGQUALITYANDQUANTITYEFFICIENCYANDEFFECTIVENESSASWELLASITSRELEVANCETOWARDSTHENEEDSSOTHATITBSCONTRIBUTIONTOTHENATIONALDEVELOPMENTWILLBEGREATERANDMOREMEANINGFULTHATTHEPROFICIENCYANDDEVELOPMENTOFSCIENCEANDTECHNOLOGYMUSTBECARRIEDOUTINTACTANDINTEGRATEDASINTHEROLEOFRESEARCHANDDEVELOPMENTUNIVERSITYITBSDEVELOPMENTINSCIENCEANDTECHNOLOGYISBASEDONTHEPURPOSETOBOOSTTHENATIONSDEVELOPMENTPLANTHEREFOREITBWILLDEVELOPITSELFINRESEARCHANDMANUFACTURECOMMUNICATIONANDINFORMATIONTECHNOLOGYLANDSEAANDAEROSPACETRANSPORTATIONENVIRONMENTANDBIOTECHNOLOGYANDBIOSCIENCESTHATTHEMISSIONOFCOMMUNITYSERVICEISEXPECTEDTOBEABLETOBUILDBUSINESSINSIGHTSINTOINDEPENDENCEWHICHISTHEINITIALCAPITALFORTHEMAINTENANCEOFHIGHEREDUCATIONAUTONOMYBUSINESSINSIGHTFORINDEPENDENCEISDIRECTEDTOREACHACTIONABLEACHIEVEMENTANDTHEDUTYOFEDUCATIONANDACADEMICASHIGHASPOSSIBLETHATTHEDEVELOPMENTOFITBWILLBEBASEDONTHESTRENGTHSOFTHEINSTITUTIONINTHEFORMOFOPTIMUMUSEOFINFORMATIONTHEMAINTENANCEOFCOMPETENTTEACHINGSTAFFWITHHIGHQUALITYSKILLSANDHIGHDEVOTIONINTEGRATEDEDUCATIONSYSTEMANDCLOSECOLLABORATIONWITHGOVERNMENTINDUSTRYRESEARCHINSTITUTIONSASWELLASDOMESTICANDOVERSEASEDUCATIONINSTITUTIONSTHEDEVELOPMENTISEXPECTEDTOBEMONITOREDANDMEASUREDSOITISINLINEWITHTHETHREEPILLARSOFHIGHEREDUCATIONDEVELOPMENTOFHUMANRESOURCESFACILITIESSTANDARDANDWORKPROCEDURESASWELLASTHEECONOMICSOCIOCULTURALANDSAFETYDEVELOPMENTTHATTHEWILLINGNESSTODEVELOPITBISREFLECTEDBYTHEEXCITEMENTANDMINDSETOFALLITBSTAKEHOLDERSWHOACKNOWLEDGETHENATUREOFSCIENTIFICFACTTHATTHESCIENTIFICREALITYCANBEREACHEDBYOBSERVATIONFOLLOWEDBYLOGICALSTUDYTHATTHEDISCOVERYOFSCIENTIFICTRUTHISTHERIGHTOFEVERYHUMANBEINGSSOTHATSCIENCEANDTECHNOLOGYCANBEUSEDTOIMPROVEHUMANWELFAREINTHEWORLDESPECIALLYININDONESIAINTHEFIFTHDECADEOFTHEINSTITUTTEKNOLOGIBANDUNGSLEGALSTATUSWASSETTOBESTATEOWNEDUNIVERSITYACCORDINGTOTHEGOVERNMENTREGULATIONNOOFONDECEMBERSTATEOWNEDUNIVERSITIESWERESOMETHINGUNIQUEANDNEWBYTHENTHISBEGANWITHTHEISSUANCEOFGOVERNMENTREGULATIONNOOFONTHEESTABLISHMENTOFSTATEOWNEDUNIVERSITIESASLEGALBODYFOLLOWEDBYTHEISSUANCEOFGOVERNMENTREGULATIONNOOFONTHEESTABLISHMENTOFINSTITUTTEKNOLOGIBANDUNGASSTATEOWNEDUNIVERSITYTHUSWITHTHEISSUANCEOFTHELATTERREGULATIONITBHASLEGALLYBECOMEALEGALBODYTHISMEANSITBHADTHERIGHTTOCARRYOUTLEGALACTIONSASLONGASFOLLOWINGVALIDREGULATIONSWITHTHEISSUANCEOFGOVERNMENTREGULATIONNOOFRIVALRYBETWEENUNIVERSITIESWHICHWASDRIVENBYGLOBALIZATIONBECAMETHEFIRSTCONSIDERATIONSOTOBOOSTCOMPETITIVENESSINDONESIANEEDSUNIVERSITIESTHATCANCREATEDEMOCRATICINDEPENDENTCITIZENSTHATCANCOMPETEGLOBALLYINORDERTOACHIEVETHATUNIVERSITIESINCLUDINGITBNEEDTOBEINDEPENDENTAUTONOMOUSANDTHUSHAVINGBIGGERRESPONSIBILITIESONJULYITBCELEBRATESITS100THYEARANNIVERSARYNOWITBHASGRADUATEDALUMNIWHOHAVESIGNIFICANTROLESINDEVELOPINGTHECOUNTRYITBNOWHASFACULTIESSCHOOLSSTUDYPROGRAMSRESEARCHGROUPSCENTERSRESEARCHCENTERSANDCENTERSOFEXCELLENCECURRENTLYITBHASMORETHANTHOUSANDACTIVESTUDENTSACADEMICSTAFFSANDPROFESSORSITBNOWHASTWOMAINCAMPUSGANESACAMPUSANDJATINANGORCAMPUSITBHASALSOBECOMETHELEADINGNATIONALUNIVERSITYANDALEADERINTHEDEVELOPMENTOFRESEARCHTECHNOLOGYANDARTSININDONESIA

Kunci: CHEONKIMSONG

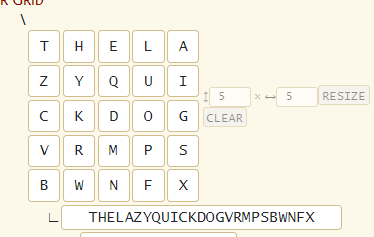
Alfabet normal

## **Kriptanalisis *Playfair Cipher***

Sumber: Harry Potter and the Philosopher’s Stone (Chapter 1)

MRANDMRSDURSLEYOFNUMBERFOURPRIVETDRIVEWEREPROUDTOSAYTHATTHEYWEREPERFECTLYNORMALTHANKYOUVERYMUCHTHEYWERETHELASTPEOPLEYOUDEXPECTTOBEINVOLVEDINANYTHINGSTRANGEORMYSTERIOUSBECAUSETHEYJUSTDIDNTHOLDWITHSUCHNONSENSEMRDURSLEYWASTHEDIRECTOROFAFIRMCALLEDGRUNNINGSWHICHMADEDRILLSHEWASABIGBEEFYMANWITHHARDLYANYNECKALTHOUGHHEDIDHAVEAVERYLARGEMOUSTACHEMRSDURSLEYWASTHINANDBLONDEANDHADNEARLYTWICETHEUSUALAMOUNTOFNECKWHICHCAMEINVERYUSEFULASSHESPENTSOMUCHOFHERTIMECRANINGOVERGARDENFENCESSPYINGONTHENEIGHBOURSTHEDURSLEYSHADASMALLSONCALLEDDUDLEYANDINTHEIROPINIONTHEREWASNOFINERBOYANYWHERETHEDURSLEYSHADEVERYTHINGTHEYWANTEDBUTTHEYALSOHADASECRETANDTHEIRGREATESTFEARWASTHATSOMEBODYWOULDDISCOVERITTHEYDIDNTTHINKTHEYCOULDBEARITIFANYONEFOUNDOUTABOUTTHEPOTTERSMRSPOTTERWASMRSDURSLEYSSISTERBUTTHEYHADNTMETFORSEVERALYEARSINFACTMRSDURSLEYPRETENDEDSHEDIDNTHAVEASISTERBECAUSEHERSISTERANDHERGOODFORNOTHINGHUSBANDWEREASUNDURSLEYISHASITWASPOSSIBLETOBETHEDURSLEYSSHUDDEREDTOTHINKWHATTHENEIGHBOURSWOULDSAYIFTHEPOTTERSARRIVEDINTHESTREETTHEDURSLEYSKNEWTHATTHEPOTTERSHADASMALLSONTOOBUTTHEYHADNEVEREVENSEENHIMTHISBOYWASANOTHERGOODREASONFORKEEPINGTHEPOTTERSAWAYTHEYDIDNTWANTDUDLEYMIXINGWITHACHILDLIKETHATWHENMRANDMRSDURSLEYWOKEUPONTHEDULLGREYTUESDAYOURSTORYSTARTSTHEREWASNOTHINGABOUTTHECLOUDYSKYOUTSIDETOSUGGESTTHATSTRANGEANDMYSTERIOUSTHINGSWOULDSOONBEHAPPENINGALLOVERTHECOUNTRYMRDURSLEYHUMMEDASHEPICKEDOUTHISMOSTBORINGTIEFORWORKANDMRSDURSLEYGOSSIPEDAWAYHAPPILYASSHEWRESTLEDASCREAMINGDUDLEYINTOHISHIGHCHAIRNONEOFTHEMNOTICEDALARGETAWNYOWLFLUTTERPASTTHEWINDOWATHALFPASTEIGHTMRDURSLEYPICKEDUPHISBRIEFCASEPECKEDMRSDURSLEYONTHECHEEKANDTRIEDTOKISSDUDLEYGOODBYEBUTMISSEDBECAUSEDUDLEYWASNOWHAVINGATANTRUMANDTHROWINGHISCEREALATTHEWALLSLITTLETYKECHORTLEDMRDURSLEYASHELEFTTHEHOUSEHEGOTINTOHISCARANDBACKEDOUTOFNUMBERFOURSDRIVEITWASONTHECORNEROFTHESTREETTHATHENOTICEDTHEFIRSTSIGNOFSOMETHINGPECULIARACATREADINGAMAPFORASECONDMRDURSLEYDIDNTREALISEWHATHEHADSEENTHENHEJERKEDHISHEADAROUNDTOLOOKAGAINTHEREWASATABBYCATSTANDINGONTHECORNEROFPRIVETDRIVEBUTTHEREWASNTAMAPINSIGHTWHATCOULDHEHAVEBEENTHINKINGOFITMUSTHAVEBEENATRICKOFTHELIGHTMRDURSLEYBLINKEDANDSTAREDATTHECATITSTAREDBACKASMRDURSLEYDROVEAROUNDTHECORNERANDUPTHEROADHEWATCHEDTHECATINHISMIRRORITWASNOWREADINGTHESIGNTHATSAIDPRIVETDRIVENOLOOKINGATTHESIGNCATSCOULDNTREADMAPSORSIGNSMRDURSLEYGAVEHIMSELFALITTLESHAKEANDPUTTHECATOUTOFHISMINDASHEDROVETOWARDSTOWNHETHOUGHTOFNOTHINGEXCEPTALARGEORDEROFDRILLSHEWASHOPINGTOGETTHATDAYBUTONTHEEDGEOFTOWNDRILLSWEREDRIVENOUTOFHISMINDBYSOMETHINGELSEASHESATINTHEUSUALMORNINGTRAFFICJAMHECOULDNTHELPNOTICINGTHATTHERESEEMEDTOBEALOTOFSTRANGELYDRESSEDPEOPLEABOUTPEOPLEINCLOAKSMRDURSLEYCOULDNTBEARPEOPLEWHODRESSEDINFUNNYCLOTHESTHEGETUPSYOUSAWONYOUNGPEOPLEHESUPPOSEDTHISWASSOMESTUPIDNEWFASHIONHEDRUMMEDHISFINGERSONTHESTEERINGWHEELANDHISEYESFELLONAHUDDLEOFTHESEWEIRDOSSTANDINGQUITECLOSEBYTHEYWEREWHISPERINGEXCITEDLYTOGETHERMRDURSLEYWASENRAGEDTOSEETHATACOUPLEOFTHEMWERENTYOUNGATALLWHYTHATMANHADTOBEOLDERTHANHEWASANDWEARINGANEMERALDGREENCLOAKTHENERVEOFHIMBUTTHENITSTRUCKMRDURSLEYTHATTHISWASPROBABLYSOMESILLYSTUNTTHESEPEOPLEWEREOBVIOUSLYCOLLECTINGFORSOMETHINGYESTHATWOULDBEITTHETRAFFICMOVEDONANDAFEWMINUTESLATERMRDURSLEYARRIVEDINTHEGRUNNINGSCARPARKHISMINDBACKONDRILLSMRDURSLEYALWAYSSATWITHHISBACKTOTHEWINDOWINHISOFFICEONTHENINTHFLOORIFHEHADNTHEMIGHTHAVEFOUNDITHARDERTOCONCENTRATEONDRILLSTHATMORNINGHEDIDNTSEETHEOWLSSWOOPINGPASTINBROADDAYLIGHTTHOUGHPEOPLEDOWNINTHESTREETDIDTHEYPOINTEDANDGAZEDOPENMOUTHEDASOWLAFTEROWLSPEDOVERHEADMOSTOFTHEMHADNEVERSEENANOWLEVENATNIGHTTIMEMRDURSLEYHOWEVERHADAPERFECTLYNORMALOWLFREEMORNINGHEYELLEDATFIVEDIFFERENTPEOPLEHEMADESEVERALIMPORTANTTELEPHONECALLSANDSHOUTEDABITMOREHEWASINAVERYGOODMOODUNTILLUNCHTIMEWHENHETHOUGHTHEDSTRETCHHISLEGSANDWALKACROSSTHEROADTOBUYHIMSELFABUNFROMTHEBAKERSOPPOSITEHEDFORGOTTENALLABOUTTHEPEOPLEINCLOAKSUNTILHEPASSEDAGROUPOFTHEMNEXTTOTHEBAKERSHEEYEDTHEMANGRILYASHEPASSEDHEDIDNTKNOWWHYBUTTHEYMADEHIMUNEASYTHISLOTWEREWHISPERINGEXCITEDLYTOOANDHECOULDNTSEEASINGLECOLLECTINGTINITWASONHISWAYBACKPASTTHEMCLUTCHINGALARGEDOUGHNUTINABAGTHATHECAUGHTAFEWWORDSOFWHATTHEYWERESAYINGTHEPOTTERSTHATSRIGHTTHATSWHATIHEARDYESTHEIRSONHARRYMRDURSLEYSTOPPEDDEADFEARFLOODEDHIMHELOOKEDBACKATTHEWHISPERERSASIFHEWANTEDTOSAYSOMETHINGTOTHEMBUTTHOUGHTBETTEROFITHEDASHEDBACKACROSSTHEROADHURRIEDUPTOHISOFFICESNAPPEDATHISSECRETARYNOTTODISTURBHIMSEIZEDHISTELEPHONEANDHADALMOSTFINISHEDDIALLINGHISHOMENUMBERWHENHECHANGEDHISMINDHEPUTTHERECEIVERBACKDOWNANDSTROKEDHISMOUSTACHETHINKINGNOHEWASBEINGSTUPIDPOTTERWASNTSUCHANUNUSUALNAMEHEWASSURETHEREWERELOTSOFPEOPLECALLEDPOTTERWHOHADASONCALLEDHARRYCOMETOTHINKOFITHEWASNTEVENSUREHISNEPHEWWASCALLEDHARRYHEDNEVEREVENSEENTHEBOYITMIGHTHAVEBEENHARVEYORHAROLDTHEREWASNOPOINTINWORRYINGMRSDURSLEYSHEALWAYSGOTSOUPSETATANYMENTIONOFHERSISTERHEDIDNTBLAMEHERIFHEDHADASISTERLIKETHATBUTALLTHESAMETHOSEPEOPLEINCLOAKSHEFOUNDITALOTHARDERTOCONCENTRATEONDRILLSTHATAFTERNOONANDWHENHELEFTTHEBUILDINGATFIVEOCLOCKHEWASSTILLSOWORRIEDTHATHEWALKEDSTRAIGHTINTOSOMEONEJUSTOUTSIDETHEDOORSORRYHEGRUNTEDASTHETINYOLDMANSTUMBLEDANDALMOSTFELLITWASAFEWSECONDSBEFOREMRDURSLEYREALISEDTHATTHEMANWASWEARINGAVIOLETCLOAKHEDIDNTSEEMATALLUPSETATBEINGALMOSTKNOCKEDTOTHEGROUNDONTHECONTRARYHISFACESPLITINTOAWIDESMILEANDHESAIDINASQUEAKYVOICETHATMADEPASSERSBYSTAREDONTBESORRYMYDEARSIRFORNOTHINGCOULDUPSETMETODAYREJOICEFORYOUKNOWWHOHASGONEATLASTEVENMUGGLESLIKEYOURSELFSHOULDBECELEBRATINGTHISHAPPYHAPPYDAYANDTHEOLDMANHUGGEDMRDURSLEYAROUNDTHEMIDDLEANDWALKEDOFFMRDURSLEYSTOODROOTEDTOTHESPOTHEHADBEENHUGGEDBYACOMPLETESTRANGERHEALSOTHOUGHTHEHADBEENCALLEDAMUGGLEWHATEVERTHATWASHEWASRATTLEDHEHURRIEDTOHISCARANDSETOFFHOMEHOPINGHEWASIMAGININGTHINGSWHICHHEHADNEVERHOPEDBEFOREBECAUSEHEDIDNTAPPROVEOFIMAGINATIONASHEPULLEDINTOTHEDRIVEWAYOFNUMBERFOURTHEFIRSTTHINGHESAWANDITDIDNTIMPROVEHISMOODWASTHETABBYCATHEDSPOTTEDTHATMORNINGITWASNOWSITTINGONHISGARDENWALLHEWASSUREITWASTHESAMEONEITHADTHESAMEMARKINGSAROUNDITSEYESSHOOSAIDMRDURSLEYLOUDLYTHECATDIDNTMOVEITJUSTGAVEHIMASTERNLOOKWASTHISNORMALCATBEHAVIOURMRDURSLEYWONDEREDTRYINGTOPULLHIMSELFTOGETHERHELETHIMSELFINTOTHEHOUSEHEWASSTILLDETERMINEDNOTTOMENTIONANYTHINGTOHISWIFEMRSDURSLEYHADHADANICENORMALDAYSHETOLDHIMOVERDINNERALLABOUTMRSNEXTDOORSPROBLEMSWITHHERDAUGHTERANDHOWDUDLEYHADLEARNTANEWWORDSHANTMRDURSLEYTRIEDTOACTNORMALLYWHENDUDLEYHADBEENPUTTOBEDHEWENTINTOTHELIVINGROOMINTIMETOCATCHTHELASTREPORTONTHEEVENINGNEWSANDFINALLYBIRDWATCHERSEVERYWHEREHAVEREPORTEDTHATTHENATIONSOWLSHAVEBEENBEHAVINGVERYUNUSUALLYTODAYALTHOUGHOWLSNORMALLYHUNTATNIGHTANDAREHARDLYEVERSEENINDAYLIGHTTHEREHAVEBEENHUNDREDSOFSIGHTINGSOFTHESEBIRDSFLYINGINEVERYDIRECTIONSINCESUNRISEEXPERTSAREUNABLETOEXPLAINWHYTHEOWLSHAVESUDDENLYCHANGEDTHEIRSLEEPINGPATTERNTHENEWSREADERALLOWEDHIMSELFAGRINMOSTMYSTERIOUSANDNOWOVERTOJIMMCGUFFINWITHTHEWEATHERGOINGTOBEANYMORESHOWERSOFOWLSTONIGHTJIMWELLTEDSAIDTHEWEATHERMANIDONTKNOWABOUTTHATBUTITSNOTONLYTHEOWLSTHATHAVEBEENACTINGODDLYTODAYVIEWERSASFARAPARTASKENTYORKSHIREANDDUNDEEHAVEBEENPHONINGINTOTELLMETHATINSTEADOFTHERAINIPROMISEDYESTERDAYTHEYVEHADADOWNPOUROFSHOOTINGSTARSPERHAPSPEOPLEHAVEBEENCELEBRATINGBONFIRENIGHTEARLYITSNOTUNTILNEXTWEEKFOLKSBUTICANPROMISEAWETNIGHTTONIGHTMRDURSLEYSATFROZENINHISARMCHAIRSHOOTINGSTARSALLOVERBRITAINOWLSFLYINGBYDAYLIGHTMYSTERIOUSPEOPLEINCLOAKSALLOVERTHEPLACEANDAWHISPERAWHISPERABOUTTHEPOTTERSMRSDURSLEYCAMEINTOTHELIVINGROOMCARRYINGTWOCUPSOFTEAITWASNOGOODHEDHAVETOSAYSOMETHINGTOHERHECLEAREDHISTHROATNERVOUSLYERPETUNIADEARYOUHAVENTHEARDFROMYOURSISTERLATELYHAVEYOUASHEHADEXPECTEDMRSDURSLEYLOOKEDSHOCKEDANDANGRYAFTERALLTHEYNORMALLYPRETENDEDSHEDIDNTHAVEASISTERNOSHESAIDSHARPLYWHYFUNNYSTUFFONTHENEWSMRDURSLEYMUMBLEDOWLSSHOOTINGSTARSANDTHEREWEREALOTOFFUNNYLOOKINGPEOPLEINTOWNTODAYSOSNAPPEDMRSDURSLEYWELLIJUSTTHOUGHTMAYBEITWASSOMETHINGTODOWITHYOUKNOWHERLOTMRSDURSLEYSIPPEDHERTEATHROUGHPURSEDLIPSMRDURSLEYWONDEREDWHETHERHEDAREDTELLHERHEDHEARDTHENAMEPOTTERHEDECIDEDHEDIDNTDAREINSTEADHESAIDASCASUALLYASHECOULDTHEIRSONHEDBEABOUTDUDLEYSAGENOWWOULDNTHEISUPPOSESOSAIDMRSDURSLEYSTIFFLYWHATSHISNAMEAGAINHOWARDISNTITHARRYNASTYCOMMONNAMEIFYOUASKMEOHYESSAIDMRDURSLEYHISHEARTSINKINGHORRIBLYYESIQUITEAGREEHEDIDNTSAYANOTHERWORDONTHESUBJECTASTHEYWENTUPSTAIRSTOBEDWHILEMRSDURSLEYWASINTHEBATHROOMMRDURSLEYCREPTTOTHEBEDROOMWINDOWANDPEEREDDOWNINTOTHEFRONTGARDENTHECATWASSTILLTHEREITWASSTARINGDOWNPRIVETDRIVEASTHOUGHITWASWAITINGFORSOMETHINGWASHEIMAGININGTHINGSCOULDALLTHISHAVEANYTHINGTODOWITHTHEPOTTERSIFITDIDIFITGOTOUTTHATTHEYWERERELATEDTOAPAIROFWELLHEDIDNTTHINKHECOULDBEARITTHEDURSLEYSGOTINTOBEDMRSDURSLEYFELLASLEEPQUICKLYBUTMRDURSLEYLAYAWAKETURNINGITALLOVERINHISMINDHISLASTCOMFORTINGTHOUGHTBEFOREHEFELLASLEEPWASTHATEVENIFTHEPOTTERSWEREINVOLVEDTHEREWASNOREASONFORTHEMTOCOMENEARHIMANDMRSDURSLEYTHEPOTTERSKNEWVERYWELLWHATHEANDPETUNIATHOUGHTABOUTTHEMANDTHEIRKINDHECOULDNTSEEHOWHEANDPETUNIACOULDGETMIXEDUPINANYTHINGTHATMIGHTBEGOINGONHEYAWNEDANDTURNEDOVERITCOULDNTAFFECTTHEMHOWVERYWRONGHEWASMRDURSLEYMIGHTHAVEBEENDRIFTINGINTOANUNEASYSLEEPBUTTHECATONTHEWALLOUTSIDEWASSHOWINGNOSIGNOFSLEEPINESSITWASSITTINGASSTILLASASTATUEITSEYESFIXEDUNBLINKINGLYONTHEFARCORNEROFPRIVETDRIVEITDIDNTSOMUCHASQUIVERWHENACARDOORSLAMMEDINTHENEXTSTREETNORWHENTWOOWLSSWOOPEDOVERHEADINFACTITWASNEARLYMIDNIGHTBEFORETHECATMOVEDATALLAMANAPPEAREDONTHECORNERTHECATHADBEENWATCHINGAPPEAREDSOSUDDENLYANDSILENTLYYOUDHAVETHOUGHTHEDJUSTPOPPEDOUTOFTHEGROUNDTHECATSTAILTWITCHEDANDITSEYESNARROWEDNOTHINGLIKETHISMANHADEVERBEENSEENINPRIVETDRIVEHEWASTALLTHINANDVERYOLDJUDGINGBYTHESILVEROFHISHAIRANDBEARDWHICHWEREBOTHLONGENOUGHTOTUCKINTOHISBELTHEWASWEARINGLONGROBESAPURPLECLOAKWHICHSWEPTTHEGROUNDANDHIGHHEELEDBUCKLEDBOOTSHISBLUEEYESWERELIGHTBRIGHTANDSPARKLINGBEHINDHALFMOONSPECTACLESANDHISNOSEWASVERYLONGANDCROOKEDASTHOUGHITHADBEENBROKENATLEASTTWICETHISMANSNAMEWASALBUSDUMBLEDOREALBUSDUMBLEDOREDIDNTSEEMTOREALISETHATHEHADJUSTARRIVEDINASTREETWHEREEVERYTHINGFROMHISNAMETOHISBOOTSWASUNWELCOMEHEWASBUSYRUMMAGINGINHISCLOAKLOOKINGFORSOMETHINGBUTHEDIDSEEMTOREALISEHEWASBEINGWATCHEDBECAUSEHELOOKEDUPSUDDENLYATTHECATWHICHWASSTILLSTARINGATHIMFROMTHEOTHERENDOFTHESTREETFORSOMEREASONTHESIGHTOFTHECATSEEMEDTOAMUSEHIMHECHUCKLEDANDMUTTEREDISHOULDHAVEKNOWNHEHADFOUNDWHATHEWASLOOKINGFORINHISINSIDEPOCKETITSEEMEDTOBEASILVERCIGARETTELIGHTERHEFLICKEDITOPENHELDITUPINTHEAIRANDCLICKEDITTHENEARESTSTREETLAMPWENTOUTWITHALITTLEPOPHECLICKEDITAGAINTHENEXTLAMPFLICKEREDINTODARKNESSTWELVETIMESHECLICKEDTHEPUTOUTERUNTILTHEONLYLIGHTSLEFTINTHEWHOLESTREETWERETWOTINYPINPRICKSINTHEDISTANCEWHICHWERETHEEYESOFTHECATWATCHINGHIMIFANYONELOOKEDOUTOFTHEIRWINDOWNOWEVENBEADYEYEDMRSDURSLEYTHEYWOULDNTBEABLETOSEEANYTHINGTHATWASHAPPENINGDOWNONTHEPAVEMENTDUMBLEDORESLIPPEDTHEPUTOUTERBACKINSIDEHISCLOAKANDSETOFFDOWNTHESTREETTOWARDSNUMBERFOURWHEREHESATDOWNONTHEWALLNEXTTOTHECATHEDIDNTLOOKATITBUTAFTERAMOMENTHESPOKETOITFANCYSEEINGYOUHEREPROFESSORMCGONAGALLHETURNEDTOSMILEATTHETABBYBUTITHADGONEINSTEADHEWASSMILINGATARATHERSEVERELOOKINGWOMANWHOWASWEARINGSQUAREGLASSESEXACTLYTHESHAPEOFTHEMARKINGSTHECATHADHADAROUNDITSEYESSHETOOWASWEARINGACLOAKANEMERALDONEHERBLACKHAIRWASDRAWNINTOATIGHTBUNSHELOOKEDDISTINCTLYRUFFLEDHOWDIDYOUKNOWITWASMESHEASKEDMYDEARPROFESSORIVENEVERSEENACATSITSOSTIFFLYYOUDBESTIFFIFYOUDBEENSITTINGONABRICKWALLALLDAYSAIDPROFESSORMCGONAGALLALLDAYWHENYOUCOULDHAVEBEENCELEBRATINGIMUSTHAVEPASSEDADOZENFEASTSANDPARTIESONMYWAYHEREPROFESSORMCGONAGALLSNIFFEDANGRILYOHYESEVERYONESCELEBRATINGALLRIGHTSHESAIDIMPATIENTLYYOUDTHINKTHEYDBEABITMORECAREFULBUTNOEVENTHEMUGGLESHAVENOTICEDSOMETHINGSGOINGONITWASONTHEIRNEWSSHEJERKEDHERHEADBACKATTHEDURSLEYSDARKLIVINGROOMWINDOWIHEARDITFLOCKSOFOWLSSHOOTINGSTARSWELLTHEYRENOTCOMPLETELYSTUPIDTHEYWEREBOUNDTONOTICESOMETHINGSHOOTINGSTARSDOWNINKENTILLBETTHATWASDEDALUSDIGGLEHENEVERHADMUCHSENSEYOUCANTBLAMETHEMSAIDDUMBLEDOREGENTLYWEVEHADPRECIOUSLITTLETOCELEBRATEFORELEVENYEARSIKNOWTHATSAIDPROFESSORMCGONAGALLIRRITABLYBUTTHATSNOREASONTOLOSEOURHEADSPEOPLEAREBEINGDOWNRIGHTCARELESSOUTONTHESTREETSINBROADDAYLIGHTNOTEVENDRESSEDINMUGGLECLOTHESSWAPPINGRUMOURSSHETHREWASHARPSIDEWAYSGLANCEATDUMBLEDOREHEREASTHOUGHHOPINGHEWASGOINGTOTELLHERSOMETHINGBUTHEDIDNTSOSHEWENTONAFINETHINGITWOULDBEIFONTHEVERYDAYYOUKNOWWHOSEEMSTOHAVEDISAPPEAREDATLASTTHEMUGGLESFOUNDOUTABOUTUSALLISUPPOSEHEREALLYHASGONEDUMBLEDOREITCERTAINLYSEEMSSOSAIDDUMBLEDOREWEHAVEMUCHTOBETHANKFULFORWOULDYOUCAREFORASHERBETLEMONAWHATASHERBETLEMONTHEYREAKINDOFMUGGLESWEETIMRATHERFONDOFNOTHANKYOUSAIDPROFESSORMCGONAGALLCOLDLYASTHOUGHSHEDIDNTTHINKTHISWASTHEMOMENTFORSHERBETLEMONSASISAYEVENIFYOUKNOWWHOHASGONEMYDEARPROFESSORSURELYASENSIBLEPERSONLIKEYOURSELFCANCALLHIMBYHISNAMEALLTHISYOUKNOWWHONONSENSEFORELEVENYEARSIHAVEBEENTRYINGTOPERSUADEPEOPLETOCALLHIMBYHISPROPERNAMEVOLDEMORTPROFESSORMCGONAGALLFLINCHEDBUTDUMBLEDOREWHOWASUNSTICKINGTWOSHERBETLEMONSSEEMEDNOTTONOTICEITALLGETSSOCONFUSINGIFWEKEEPSAYINGYOUKNOWWHOIHAVENEVERSEENANYREASONTOBEFRIGHTENEDOFSAYINGVOLDEMORTSNAMEIKNOWYOUHAVENTSAIDPROFESSORMCGONAGALLSOUNDINGHALFEXASPERATEDHALFADMIRINGBUTYOUREDIFFERENTEVERYONEKNOWSYOURETHEONLYONEYOUKNOWOHALLRIGHTVOLDEMORTWASFRIGHTENEDOFYOUFLATTERMESAIDDUMBLEDORECALMLYVOLDEMORTHADPOWERSIWILLNEVERHAVEONLYBECAUSEYOURETOOWELLNOBLETOUSETHEMITSLUCKYITSDARKIHAVENTBLUSHEDSOMUCHSINCEMADAMPOMFREYTOLDMESHELIKEDMYNEWEARMUFFSPROFESSORMCGONAGALLSHOTASHARPLOOKATDUMBLEDOREANDSAIDTHEOWLSARENOTHINGTOTHERUMOURSTHATAREFLYINGAROUNDYOUKNOWWHATEVERYONESSAYINGABOUTWHYHESDISAPPEAREDABOUTWHATFINALLYSTOPPEDHIMITSEEMEDTHATPROFESSORMCGONAGALLHADREACHEDTHEPOINTSHEWASMOSTANXIOUSTODISCUSSTHEREALREASONSHEHADBEENWAITINGONACOLDHARDWALLALLDAYFORNEITHERASACATNORASAWOMANHADSHEFIXEDDUMBLEDOREWITHSUCHAPIERCINGSTAREASSHEDIDNOWITWASPLAINTHATWHATEVEREVERYONEWASSAYINGSHEWASNOTGOINGTOBELIEVEITUNTILDUMBLEDORETOLDHERITWASTRUEDUMBLEDOREHOWEVERWASCHOOSINGANOTHERSHERBETLEMONANDDIDNOTANSWERWHATTHEYRESAYINGSHEPRESSEDONISTHATLASTNIGHTVOLDEMORTTURNEDUPINGODRICSHOLLOWHEWENTTOFINDTHEPOTTERSTHERUMOURISTHATLILYANDJAMESPOTTERAREARETHATTHEYREDEADDUMBLEDOREBOWEDHISHEADPROFESSORMCGONAGALLGASPEDLILYANDJAMESICANTBELIEVEITIDIDNTWANTTOBELIEVEITOHALBUSDUMBLEDOREREACHEDOUTANDPATTEDHERONTHESHOULDERIKNOWIKNOWHESAIDHEAVILYPROFESSORMCGONAGALLSVOICETREMBLEDASSHEWENTONTHATSNOTALLTHEYRESAYINGHETRIEDTOKILLTHEPOTTERSSONHARRYBUTHECOULDNTHECOULDNTKILLTHATLITTLEBOYNOONEKNOWSWHYORHOWBUTTHEYRESAYINGTHATWHENHECOULDNTKILLHARRYPOTTERVOLDEMORTSPOWERSOMEHOWBROKEANDTHATSWHYHESGONEDUMBLEDORENODDEDGLUMLYITSITSTRUEFALTEREDPROFESSORMCGONAGALLAFTERALLHESDONEALLTHEPEOPLEHESKILLEDHECOULDNTKILLALITTLEBOYITSJUSTASTOUNDINGOFALLTHETHINGSTOSTOPHIMBUTHOWINTHENAMEOFHEAVENDIDHARRYSURVIVEWECANONLYGUESSSAIDDUMBLEDOREWEMAYNEVERKNOWPROFESSORMCGONAGALLPULLEDOUTALACEHANDKERCHIEFANDDABBEDATHEREYESBENEATHHERSPECTACLESDUMBLEDOREGAVEAGREATSNIFFASHETOOKAGOLDENWATCHFROMHISPOCKETANDEXAMINEDITITWASAVERYODDWATCHITHADTWELVEHANDSBUTNONUMBERSINSTEADLITTLEPLANETSWEREMOVINGAROUNDTHEEDGEITMUSTHAVEMADESENSETODUMBLEDORETHOUGHBECAUSEHEPUTITBACKINHISPOCKETANDSAIDHAGRIDSLATEISUPPOSEITWASHEWHOTOLDYOUIDBEHEREBYTHEWAYYESSAIDPROFESSORMCGONAGALLANDIDONTSUPPOSEYOUREGOINGTOTELLMEWHYYOUREHEREOFALLPLACESIVECOMETOBRINGHARRYTOHISAUNTANDUNCLETHEYRETHEONLYFAMILYHEHASLEFTNOWYOUDONTMEANYOUCANTMEANTHEPEOPLEWHOLIVEHERECRIEDPROFESSORMCGONAGALLJUMPINGTOHERFEETANDPOINTINGATNUMBERFOURDUMBLEDOREYOUCANTIVEBEENWATCHINGTHEMALLDAYYOUCOULDNTFINDTWOPEOPLEWHOARELESSLIKEUSANDTHEYVEGOTTHISSONISAWHIMKICKINGHISMOTHERALLTHEWAYUPTHESTREETSCREAMINGFORSWEETSHARRYPOTTERCOMEANDLIVEHEREITSTHEBESTPLACEFORHIMSAIDDUMBLEDOREFIRMLYHISAUNTANDUNCLEWILLBEABLETOEXPLAINEVERYTHINGTOHIMWHENHESOLDERIVEWRITTENTHEMALETTERALETTERREPEATEDPROFESSORMCGONAGALLFAINTLYSITTINGBACKDOWNONTHEWALLREALLYDUMBLEDOREYOUTHINKYOUCANEXPLAINALLTHISINALETTERTHESEPEOPLEWILLNEVERUNDERSTANDHIMHELLBEFAMOUSALEGENDIWOULDNTBESURPRISEDIFTODAYWASKNOWNASHARRYPOTTERDAYINFUTURETHEREWILLBEBOOKSWRITTENABOUTHARRYEVERYCHILDINOURWORLDWILLKNOWHISNAMEEXACTLYSAIDDUMBLEDORELOOKINGVERYSERIOUSLYOVERTHETOPOFHISHALFMOONGLASSESITWOULDBEENOUGHTOTURNANYBOYSHEADFAMOUSBEFOREHECANWALKANDTALKFAMOUSFORSOMETHINGHEWONTEVENREMEMBERCANTYOUSEEHOWMUCHBETTEROFFHELLBEGROWINGUPAWAYFROMALLTHATUNTILHESREADYTOTAKEITPROFESSORMCGONAGALLOPENEDHERMOUTHCHANGEDHERMINDSWALLOWEDANDTHENSAIDYESYESYOURERIGHTOFCOURSEBUTHOWISTHEBOYGETTINGHEREDUMBLEDORESHEEYEDHISCLOAKSUDDENLYASTHOUGHSHETHOUGHTHEMIGHTBEHIDINGHARRYUNDERNEATHITHAGRIDSBRINGINGHIMYOUTHINKITWISETOTRUSTHAGRIDWITHSOMETHINGASIMPORTANTASTHISIWOULDTRUSTHAGRIDWITHMYLIFESAIDDUMBLEDOREIMNOTSAYINGHISHEARTISNTINTHERIGHTPLACESAIDPROFESSORMCGONAGALLGRUDGINGLYBUTYOUCANTPRETENDHESNOTCARELESSHEDOESTENDTOWHATWASTHATALOWRUMBLINGSOUNDHADBROKENTHESILENCEAROUNDTHEMITGREWSTEADILYLOUDERASTHEYLOOKEDUPANDDOWNTHESTREETFORSOMESIGNOFAHEADLIGHTITSWELLEDTOAROARASTHEYBOTHLOOKEDUPATTHESKYANDAHUGEMOTORBIKEFELLOUTOFTHEAIRANDLANDEDONTHEROADINFRONTOFTHEMIFTHEMOTORBIKEWASHUGEITWASNOTHINGTOTHEMANSITTINGASTRIDEITHEWASALMOSTTWICEASTALLASANORMALMANANDATLEASTFIVETIMESASWIDEHELOOKEDSIMPLYTOOBIGTOBEALLOWEDANDSOWILDLONGTANGLESOFBUSHYBLACKHAIRANDBEARDHIDMOSTOFHISFACEHEHADHANDSTHESIZEOFDUSTBINLIDSANDHISFEETINTHEIRLEATHERBOOTSWERELIKEBABYDOLPHINSINHISVASTMUSCULARARMSHEWASHOLDINGABUNDLEOFBLANKETSHAGRIDSAIDDUMBLEDORESOUNDINGRELIEVEDATLASTANDWHEREDIDYOUGETTHATMOTORBIKEBORROWEDITPROFESSORDUMBLEDORESIRSAIDTHEGIANTCLIMBINGCAREFULLYOFFTHEMOTORBIKEASHESPOKEYOUNGSIRIUSBLACKLENTITMEIVEGOTHIMSIRNOPROBLEMSWERETHERENOSIRHOUSEWASALMOSTDESTROYEDBUTIGOTHIMOUTALLRIGHTBEFORETHEMUGGLESSTARTEDSWARMINAROUNDHEFELLASLEEPASWEWASFLYINOVERBRISTOLDUMBLEDOREANDPROFESSORMCGONAGALLBENTFORWARDOVERTHEBUNDLEOFBLANKETSINSIDEJUSTVISIBLEWASABABYBOYFASTASLEEPUNDERATUFTOFJETBLACKHAIROVERHISFOREHEADTHEYCOULDSEEACURIOUSLYSHAPEDCUTLIKEABOLTOFLIGHTNINGISTHATWHEREWHISPEREDPROFESSORMCGONAGALLYESSAIDDUMBLEDOREHELLHAVETHATSCARFOREVERCOULDNTYOUDOSOMETHINGABOUTITDUMBLEDOREEVENIFICOULDIWOULDNTSCARSCANCOMEINUSEFULIHAVEONEMYSELFABOVEMYLEFTKNEEWHICHISAPERFECTMAPOFTHELONDONUNDERGROUNDWELLGIVEHIMHEREHAGRIDWEDBETTERGETTHISOVERWITHDUMBLEDORETOOKHARRYINHISARMSANDTURNEDTOWARDSTHEDURSLEYSHOUSECOULDICOULDISAYGOODBYETOHIMSIRASKEDHAGRIDHEBENTHISGREATSHAGGYHEADOVERHARRYANDGAVEHIMWHATMUSTHAVEBEENAVERYSCRATCHYWHISKERYKISSTHENSUDDENLYHAGRIDLETOUTAHOWLLIKEAWOUNDEDDOGSHHHHISSEDPROFESSORMCGONAGALLYOULLWAKETHEMUGGLESSSSORRYSOBBEDHAGRIDTAKINGOUTALARGESPOTTEDHANDKERCHIEFANDBURYINGHISFACEINITBUTICCCANTSTANDITLILYANJAMESDEADANPOORLITTLEHARRYOFFTERLIVEWITHMUGGLESYESYESITSALLVERYSADBUTGETAGRIPONYOURSELFHAGRIDORWELLBEFOUNDPROFESSORMCGONAGALLWHISPEREDPATTINGHAGRIDGINGERLYONTHEARMASDUMBLEDORESTEPPEDOVERTHELOWGARDENWALLANDWALKEDTOTHEFRONTDOORHELAIDHARRYGENTLYONTHEDOORSTEPTOOKALETTEROUTOFHISCLOAKTUCKEDITINSIDEHARRYSBLANKETSANDTHENCAMEBACKTOTHEOTHERTWOFORAFULLMINUTETHETHREEOFTHEMSTOODANDLOOKEDATTHELITTLEBUNDLEHAGRIDSSHOULDERSSHOOKPROFESSORMCGONAGALLBLINKEDFURIOUSLYANDTHETWINKLINGLIGHTTHATUSUALLYSHONEFROMDUMBLEDORESEYESSEEMEDTOHAVEGONEOUTWELLSAIDDUMBLEDOREFINALLYTHATSTHATWEVENOBUSINESSSTAYINGHEREWEMAYASWELLGOANDJOINTHECELEBRATIONSYEAHSAIDHAGRIDINAVERYMUFFLEDVOICEIDBESTGETTHISBIKEAWAYGNIGHTPROFESSORMCGONAGALLPROFESSORDUMBLEDORESIRWIPINGHISSTREAMINGEYESONHISJACKETSLEEVEHAGRIDSWUNGHIMSELFONTOTHEMOTORBIKEANDKICKEDTHEENGINEINTOLIFEWITHAROARITROSEINTOTHEAIRANDOFFINTOTHENIGHTISHALLSEEYOUSOONIEXPECTPROFESSORMCGONAGALLSAIDDUMBLEDORENODDINGTOHERPROFESSORMCGONAGALLBLEWHERNOSEINREPLYDUMBLEDORETURNEDANDWALKEDBACKDOWNTHESTREETONTHECORNERHESTOPPEDANDTOOKOUTTHESILVERPUTOUTERHECLICKEDITONCEANDTWELVEBALLSOFLIGHTSPEDBACKTOTHEIRSTREETLAMPSSOTHATPRIVETDRIVEGLOWEDSUDDENLYORANGEANDHECOULDMAKEOUTATABBYCATSLINKINGAROUNDTHECORNERATTHEOTHERENDOFTHESTREETHECOULDJUSTSEETHEBUNDLEOFBLANKETSONTHESTEPOFNUMBERFOURGOODLUCKHARRYHEMURMUREDHETURNEDONHISHEELANDWITHASWISHOFHISCLOAKHEWASGONEABREEZERUFFLEDTHENEATHEDGESOFPRIVETDRIVEWHICHLAYSILENTANDTIDYUNDERTHEINKYSKYTHEVERYLASTPLACEYOUWOULDEXPECTASTONISHINGTHINGSTOHAPPENHARRYPOTTERROLLEDOVERINSIDEHISBLANKETSWITHOUTWAKINGUPONESMALLHANDCLOSEDONTHELETTERBESIDEHIMANDHESLEPTONNOTKNOWINGHEWASSPECIALNOTKNOWINGHEWASFAMOUSNOTKNOWINGHEWOULDBEWOKENINAFEWHOURSTIMEBYMRSDURSLEYSSCREAMASSHEOPENEDTHEFRONTDOORTOPUTOUTTHEMILKBOTTLESNORTHATHEWOULDSPENDTHENEXTFEWWEEKSBEINGPRODDEDANDPINCHEDBYHISCOUSINDUDLEYHECOULDNTKNOWTHATATTHISVERYMOMENTPEOPLEMEETINGINSECRETALLOVERTHECOUNTRYWEREHOLDINGUPTHEIRGLASSESANDSAYINGINHUSHEDVOICESTOHARRYPOTTERTHEBOYWHOLIVED

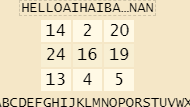
Key: THELAZYQUICKDOGVRMPSBWNFX



## **Hill Cipher**

Plain teks:

HELLOAIHAIBARATHEUKRAINEBORNWINNEROFTHEMISSJAPANPAGEANTHASRELINQUISHEDHERCROWNAFTERAREPORTEMERGEDOFANAFFAIRSHEHADWITHAMARRIEDDOCTORKAROLINASHIINOSNOMINATIONINJANUARYFIRSTSPARKEDDEBATEAFTERSOMERIGHTWINGERSQUESTIONEDTHETITLEBEINGAWARDEDTOANATURALISEDJAPANESECITIZENASCANDALTHENERUPTEDOVERHERPRIVATELIFEWHENWEEKLYMAGAZINESHUKANBUNSHUNREPORTEDONHEREXTRAMARITALRELATIONSHIPTABOOFORBEAUTYPAGEANTCONTESTANTSWHOAREHELDTOSQUEAKYCLEANMORALSTANDARDSJAPANESEENTERTAINMENTPERSONALITIESWHOHAVEAFFAIRSDABBLEINDRUGSORSUFFEROTHERSCANDALSALSOOFTENFINDTHEMSELVESSHUNNEDBYTHEIRFANSANDEMPLOYERSTHEMISSJAPANASSOCIATIONSAIDMONDAYTHATITHADACCEPTEDAREQUESTFROMSHIINOTORETURNTHECROWNFORPERSONALREASONSADDINGTHEREWOULDBENOMISSJAPANFOCONAN



## **(Bonus) Affine Cipher**

Solver Key:

| def find\_m(a, c, d):  c\_inv = pow(c, -1, d)  # Cari nilai b  b = (a \* c\_inv) % d  return b  def find\_b(a, c):  b = a % c  return b  a = 16 - 95  c = 255 - 70  d = 256  m = find\_m(a, c, d)  print("Nilai m:", m)  b = find\_b(95 - m \* 70, 256)  print("Nilai b:", b)  """  Diambil sampel  P1 = 70  P2 = 255  C1 = 95  C2 = 16  16 = m \* 255 + b mod 256  95 = m \* 70 + b mod 256  16 - 95 = m \* 185 mod 256  Dengan invers modulus, didapatkan m = 185  95 - 185 \* 70 = b mod 256  Didapatkan b = 201  """ |
| --- |

Solver Image

| import math  import random  def affine\_cipher(hex\_values, m, b, n):  plain\_hex = []  m\_inv = pow(m, -1, n)  for i in range(len(hex\_values)):  D = hex((m\_inv \* ( int(hex\_values[i], 16) - b)) % n)  plain\_hex.append(D)  return plain\_hex  def read\_image\_to\_bytes(image\_path):  try:  with open(image\_path, "rb") as image:  f = image.read()  b = bytearray(f)  array\_of\_hex = [hex(byte) for byte in b]  return array\_of\_hex  except FileNotFoundError:  print("Error: File not found.")  return None, None, None  except ValueError as e:  print("Error:", e)  return None, None, None  def array\_of\_hex\_to\_bytearray(array\_of\_hex):  bytearray\_data = bytearray()  for hex\_value in array\_of\_hex:  if hex\_value.startswith('0x'):  hex\_value = hex\_value[2:]  byte\_value = int(hex\_value, 16)  bytearray\_data.append(byte\_value)  return bytearray\_data  def create\_file\_from\_bytes(file\_path, bytes\_data):  try:  with open(file\_path, "wb") as file:  file.write(bytes\_data)  print("File berhasil dibuat:", file\_path)  except Exception as e:  print("Error:", e)  def main():  image\_path = "./chall.jpg"  n = 256  m = 185  b = 201  hex\_values = read\_image\_to\_bytes(image\_path)  if hex\_values is not None:  plain\_hex = affine\_cipher(hex\_values, m, b, n)  bytearray\_cipher = array\_of\_hex\_to\_bytearray(plain\_hex)  create\_file\_from\_bytes("./flag.jpg", bytearray\_cipher)  if \_\_name\_\_ == "\_\_main\_\_":  main() |
| --- |

Image asli

