## **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 bdef find\_b(a, c): b = a % c return ba = 16 - 95c = 255 - 70d = 256m = find\_m(a, c, d)print("Nilai m:", m)b = find\_b(95 - m \* 70, 256)print("Nilai b:", b)"""Diambil sampelP1 = 70P2 = 255C1 = 95C2 = 1616 = m \* 255 + b mod 25695 = m \* 70 + b mod 25616 - 95 = m \* 185 mod 256Dengan invers modulus, didapatkan m = 18595 - 185 \* 70 = b mod 256Didapatkan b = 201""" |
| --- |

Solver Image

| import mathimport randomdef 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\_hexdef 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, Nonedef 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\_datadef 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

