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>1k8kG

MSKNTVSSARFRKVDVDEYDENKFVDEDDGGDGQAGPDEGEVDSCLRQGNMTAALQAALKNPPI  
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LAAGGVGSIVRVLTARKTV

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>1kqfB

MAMETQDIKRSATNSITPPSQVRDYKAEVAKLIDVSTCIGCKACQVACSEWNDIRDEVGHCVGVYD  
NPADLSAKSWTVMRFSETEQNGKLEWLIRKDGCMHCEDPGCLKACPSAGAIQYANGIVDFQSENCI  
GCGYCIAGCPCFNRLNKEDNRVYKCTLCVDRVSVGQEPACVKTCPTGAIHFGTKKEMLELAEQRVAK  
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AGLIFHYIGIPNKEVDDDEEDHHE

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>1a1qA

APITAYSQQTRGLGCIITSLTGRDKNQVEGEVQVVSTATQSFSLATCVNGVCWTVYHGAGSKTLGAP  
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>1a7jA

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AVNSEVNIAGLADLKIGVVPVINLEWIQKIHRDRATRGTTEAVTDVILRRMHAYVHCIVPQFSQTDI  
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NRPDYLDFAESGQVYFGIIAL



KALEEAALKEALERERVDVSLPGASLFGGLHPITLMERELVEIFRALGYQAVEGPEVESEFFNFDALNIP  
EHHPARMWDTFWLTGEGFRLEGPLGEEVEGRLLLRTHTSPMQVRYMVAHTPPFRIVVPGRVFRFE  
QTDATEAVFHQLEGLVVGEGIAMAHKGAIELAQALFGPDSKVRFPVYFPFVEPGAQFAVWWP  
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>1bg8C

ADAQKAADNKKPVNSWTCEDFLAVDESFQPTAVGF AEALNNKDKPEDAVLDVQGIATVTPAIVQA  
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>1brmA

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ERKVTTLTRSGELPVDNFGVPLAGSLIPWIDKQLDNGQSREEWKQAETNKILNTSSVIPVDGLCVRV  
GALRCHSQAFTIKLKKDVSIPTVEELLA AHNPWAKVVPNDREITMRELT PAAVTGTLTTPVGR LRKLN  
MGPEFLS AFTVGDQLLWGAAEPLRRLRQLA

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>1bxtA

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NENILSFDITTKKQVTVQELDC KTRKILVSRKNLYEFNNSPYETGYIKFIESSGDSFWYDMMPAPGAIF  
DQSKYLMLYNDNKTVSSSAIAIEVHLTKK

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>1cz3A

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>1daeA

SKRYFVTGTDTEVGKTVASCALLQAAKAAGYRTAGYKPVASGSEKTPEGLRNSDALALQRNSSLQLD
YATVNPYTFEPTSPHIISAQEGRIEVLMSAGLRALEQQADWVLVEGAGGWFTPLSDTFTTFADWV
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QEIPQKETTFFPRSPYAVAKLYAYWITVNYRESYGMACNGILFNHESPRRGETFVTRKITAIAANIAQ
GLESLYLGNMDSLRLDWGHAKDYVKMQWMMLQQEQPEDFVIATGVQYSVRQFVEMAAAQLGIK
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>1dcsA

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QAEVGGAFDLPYRPAVLVFCGAIATLVTGGQVKAAPRHHVAAPRRDQIAGSSRTSSVFFLRPNADF
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>1di6A

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TRYLGDLSGGQVLK KIAQKAMALPSSGGLAFFTFPSIDNPTKFKQLYRARMNTLEMTPEVKHRVTEE  
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>1e5mA

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FMIPMMIANMASGLTAINLGAKPNCTVTACAAGSNAIGDAFRLVQNGYAKAMICGGTEAAITPL  
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AYHITAPVPDGRGATRAIAWALKDSGLKPEMVSINAHGTSTPANDVTETRAIKQALGNHAYNIAVS  
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>1ecwA

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NEVGTIQPVEDVTRIV KKNKETLVHVD AVQTIGKIPFSLEKLEVDYASFS AHKFHGPKGVGITYIRKGV  
PIRPLIHGGGQERGLRSGTQNVP GIVGAARAEI AVEELSEAAKHEKLRSKLVSGLNLGAIHITPLEISLPN  
TLSVSPFNIRGSTLQNL LSGYGIYVSTSSACTSK DERLRHVL DAVDRRIAQAIRISLCKYNT EEEVDYF









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>1gakA

FDDVVSRQEQSYVQRGMVNFLEEMHKLVRFRDMRWNLGPGFVFLKKVNRERMMRYCMDY  
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>1gk9A

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VAMIFVGTMANRFSDESTSEIDNLALLTALKDKYGSQGMVFNQLKWLVPASPTTIAVQESNYPLK  
FNQQNSQTAALLPRYDLPAPMLDRPAKGADGALLALAAGKNRETIAAQFAQGGLAGLGY

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KREYHYHPNQQRGAILWYHDHAMAALTRLNVAAGLVGAYIIHDPKEKRLKPSDEYDVPLITDRTINE  
DGLSFPYAPENPSPSLPNPSIVPAFCGETILVNGKVWPYLEVEPRKYRFRVINASNRTRYNLSDNGG  
DFIQIGSDGGLLPRSVKLSNSFLAPAERYDIIIDFTAYEGESII LANSAGCGGDVNPETDANIMQFRVTKP  
LAQKDES RPKYLASYPSVQHERIQNIRTLKLAGTQDEYGRPVLLLNNKRWHDVPTETPKVGTTEIWSI  
INPTRGTHPIHLHLSFRVLDRRPFDIARYQESGELSYTGPAVPPPPSEKWKDITIQAHAAGEVLRIAAATF  
GPPSYGRYVWHCHILEHEDYDMMRPMDITDPHK

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>1gu3A

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>1gu8A

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LVYYLVGPMTESASQRSSGIKSLYVRLRLNTVILWAIYPIFWLLGPPGVALLTPTVDVALIVYLDLVTKVG



















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>1a69C

ATPHINAEMGDFADVLMPGDPLRAKYIAETFLEDAREVNNVRGMLGFTGTYKGRKISVMGHGMGI  
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NAVDAAKALGIDARVGNLFSADLFYSPDGEMFDVMEKYGILGVEMEAAGIYGVAAEFGAKALTICTV  
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>1a95D

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>1a9sA

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RDHINLPGFSGENPLRGPNEERFVFRPAMSDAYDRDMRQKAHSTWKQMGEQRELQEGTYVMLG  
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HLSQIAYPLLKASQNGNVIFLSSIAGFSALPSVSLYSASKGAINQMTKSLACEWAKDNIRVNSVAPGVI  
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NWGRIVAFFSFGALCVESVDKEMQVLVSRIASWMATYLNHLEPWIQENGGWDTFVDLYG

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>1fx7B

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>1g31E

MSEVQQLPIRAVGEYVILVSEPAQAGDEEVTESGLIIGKRVQGEVPELCEVHNSVGPDPVEGFCEVGDLT  
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>1g5rA

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>1g6oB



LGLSNVVSWEVAEICTLCKKNGWIMPTVYQGMYNNAITRQVETELFPCLRHFGLRFYAFNPLAGLLTG  
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>1h1dA

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DTLDMVFLDHWKDRYLPDTLLLEKCGLLRGTVLLADNVIVPGTPDFLAYVRGSSSFECTHYSSYLEYM  
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>1hw3A

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QWRHFGAEYRDMESDYSQGVDQLQRVIDTIKTNPDDRRIIMAWNPRDLPLMALPPHALQFYVVN  
SELSCQYQRSGDMGLGVFNIASYALLTYMIAHITGLKPGDFIHTLGD AHIYLNHIEPLKIQLQREPRP  
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SPNIEACGYSDRVLQLTLGNSTITTQEAANSVVAYGRWPEYLRDSEANPVDQPTEPDVAACRFYTL D  
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CLAGDSNTTMTSYQNANPGEKGGTFTGFTPDNNTSPARRFCPVDYLLNGTLLGN AFVPH  
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LSCVLNIGACKLKMSDWQGAVDSCLEALEIDPSNTKALYRRAQGWQGLKEYDQALADLKAQEIAP  
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>1ikpA

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EMGDHELLAKLARDATFFVRAHESNEMQPTLAISHAGVSVMAQAQPRREKRWSEWASGKVLCLLD  
QLDGVNYLAQQRCNLD TWEKIYRVLAGNPAKHDL DIKPTVISHRLHFPEGGSLAALTAHQACH  
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WRGFYIAGDPALAYGYAQDQEPDARGRIRNGALLRVYVPRSSLPGFYRTSLTAAPEAAGEVERLIGH  
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GKPPREDLK

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>1ipaA

M RITSTANPRIKELARLLERKHRDSQRRFLIEGAREIERALQAGIELEQALVWEGGLNP EEGQVYAALG  
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AGAEAVLVAGGVDLYSPQVIRNSTGVVFSLRTLAASESEVLDWIKQHNLPLVATTPHAEALYWEANL  
RPPVAIAVGPEHEGLRAAWLEAAQTQVRIPMQGQADSLNVSVAALLLYEARQRLLRDRLTKTHST  
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A GVPFN TKYPYGP TSIA DNQSEV TAM LKA EWED W KSKRIT SNGAGGYKRVQRDASTNYD TVSEG M

GYGLLLAVCFNEQALFDDLYRYVKSHFNGLMHWIDANNVTSHDGGGAATDADEDIALALI  
FADKQWGSSGAINYGQEARTLINNLYNHCVEHGSYVLKPGDRWGGSSVTNPSYFAPAWYKVYAQY  
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>1itkA

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DRFDLE

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>1ixcA

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>1iznB

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>1iznC

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>1j1iA

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>1j55A

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>1jhFB

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>1bqgA

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>1c9uA

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>1ehyB

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>1epxD

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>1eypA

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>1fjrB

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>1fsiA

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>1iujA

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>1hd5A

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GIFDGCTPQFGGLPGQRYGGISSRNECDRFPDALKPGCYWRFDWFKNADNPSFSFRQVQCPAELVA  
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>1hl8B

MISMKPRYKPDWESLREHTVPKWFDKAKFGIFHWGIYSVPGWATPTGELGKVPMDAWFFQNPYAE  
WYENSLRIKESPTWEYHVKTYGENFEYEFADLFTA EKWDWPQEWADLFK KAGAKYVIPTTKHHDGFCL  
WGTYTDFNSV KRGP KRD LVGDLAKAVREAGLRFVGYSSGGLDWRFTEPIRYPEDLSYIRPNTYEYA  
DYAYKQVMELVDLYLPDVLWNDMGWPEKGKEDLKYLFAYYYNKHPEGSVNDRWGWPHWDFKTAE  
YHVNYPGDLPGYKWEFTRGIGLSFGYNRNEGPEHMLSVEQLVYTLVDVVS KGGNLLLLNVGPKGDGTI  
PDLQERLLGLGEWLRKYGD AIYGTSVWERCCA KTEDGTEIRFTRKCNRIFVIFLGIPTGEKIVIEDLNLSA  
GTVRHFLTGERLSFKNVGKNLEITVPK LLETDSITLVLEAVEE

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>1i52A

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>1i7kA

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>1i9sA

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>1iazB

SADVAGAVIDGASLFDILKTVLEALGNV KRKIAVGV DNESGKTWTALNTYFRSGTSDIVLPHKVP HYGK  
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EELYNLSPFRGDNGW HTRNLGYGLKSRGFMNSSGHAILEIHVSKA

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>1icwB

SAKELRCQCIKTYSKPFHPKFIKELRVIESGPHCANTCIIVKLS DGRELALDPKENWVQRVVEKFLKRAEN  
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>1isfB

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>1itzA

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>1ko7B

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>1a3zA

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>1a5aA

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>1a6qA

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GDFDYKCVHKGKPTQLVSPEPEVHDIERSEEDDQFIILACDGIWDMGNEELCDFVRSRLEVTDLE  
KVCNEVVDTCLYKGSRDNMSVILICFPNAPKVSPEAVKKEAELDKYLECRVEEIIKKQGEGVPLVHVM  
RTLASENIPSLPPGGELASKRNVIEAVYNRLNPNYKND DTDSTSTDDMW

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>1ah6A

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>1ftkA

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ESAEDLSKQTEIAYGTLD SGSTKEFFRRSKIAVFDKMWTYMRSAEPSV FVRTTAEGVARVRKSKGYAY  
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>1fw1A

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>1fweC

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RETIAAEDVLHDLGAFLTS SDSQAMGRVGEVILRTWQVAHRM KVQRGALAEETGDNDNFRVKRYI  
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>1gheA

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>1gk8O









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>1hfbD

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>1hh1A

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>1i1rB

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>1i21X

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>1i9gA

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>1j3pB

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>1j72A

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SERQGKAQVEIVTDGEEPAEMIQVLGPKPALKEGNPEEDLTADKANAQAAALYKVSDATGQMNLT  
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>1j77A

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>1jogB

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>1jqnA

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VVENS LWQGVPNYLRELNEQLEENLGYKLPVEFVPRFTSWMGGDRDGNPNVTADITRHVLLSRW  
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EGLLTQNEELWEPLYACYQSLQACGMGIIANGDLLD TLRVVKCFGVPLVRIDIRQESTRHTALGELTR  
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>1jy8A

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>1k3sA

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>1kbiA

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VKALFVTVDAPSLGQREKDMKLFKSNKAGPKAMKKTNVEESQGASRALSKFIDPSLTKDIEELKKK  
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>1kcfA

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>1khvB

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AAVFHNICYKLMVARFGPIAVGVDMTSRDVIINNLTSKASDFLCLDYSKWDSTMSPCVVRLAIDI  
LADCCQEQLTKSVVLTLSHPMTILDAMIVQTKRGLPSGMPFTSVINSICHWLLWSAAVYKSCAEIGL  
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>1d8dB

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>1dbiA

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>1dcoB

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>1dgmA

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>1dika

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KTTTAKKLSVIIHARLEIMSKSKKFFREVEAKIVEEIGEIGIPGGVLTGGGAKIPRINELATEVFKSPVRTG  
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>1e5kA

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RDHPTIALVNRAIEPLLELYLQAGERRVMVMRLAGGHAVDFSDHKDAFVNVNTPEELARWQEKRS  
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>1e9xA

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GEIDLLDFFAELTYTSSACLIGKKFRDQLDGRFAKLYHELERTDPLAYVDPYLPYESFRRRDEARGLV  
ALVADIMNGRIANPPTDKSRRMLDVLIAVKAETGTPRFSADEITGMFISMMFAGHHTSSGTASWTLI  
ELMRHRDAYAAVIDELDELYGDGRSVSFHALRQPQLNENVLKETLRLHPPLIILMRVAKGEFEVQGHRI











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>1i5nC

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EARRGEQLNTDIINLFLETKDIQEQLDAYKNSEEPDAASFEYICNALRQLALEAKGETTPAVRSHHHHH  
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>1i6oB

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>1i8nC

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AFPWQEDEALFQAWYEGKTVPLVDAAMRELHATGFLSNRARMNAAQFAVKHLLL PWKRCEEAFR  
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>1iukA

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>1iweB





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>1k0mB

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HRYLSNAYAREEFACSTPDDDEIEELAYEQVAKALK

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>1k2i1

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VTTGWGLTRYTNANTPDRLQQLASPLLSNTNCKKYWGTKIKDAMICAGASGVSSCMGDSGGPLVC  
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>1k6yB

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>1k7tA

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>1kgsA

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VARDE

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>1dhyA

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>1dj7A

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>1e0vA

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FADGSSGARRDSNLQRSGNDWIEVAFRTARAADPSAKLCYNDYNVENWTWAKTQAMYNMVRDF  
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>1e1eA

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GVFAPGR CSPGLDCAYPTGNSLVEPYTAGHNILLA HAEAVDLYNKHYKRDDTRIGLAFDVMGRVPYG  
TSFLDKQAEERSWDINLGFLEPVVRGDYPFSMRSLARERL PFFKDEQKEKLAGSYNMLGLNYYTSRF  
SKNIDISP NYSPVLN TDDAYASQEVNGPDGKPIGPPMGNPWIYMYPEGLKDLLMIMKNKYGNPPIYIT  
ENGIGDVDTKETPLPME AALNDYKRLDYIQRHIATLKESIDLGSNVQGYFAWSLLDNFEWFAGFTERY  
GIVYVDRNN NCTRYMKESAKWLKEFN T AKKPSKILTPA

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>1gcwB

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>1gpmD

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>1gshA

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>1gzb

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>1hfeT

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>1hfkA

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LLEAVRVAGDKQSRGRGVMVINDRIGSARYITKNASTLDTFRANEEGYLGVIIGNRIYYQNRIKDLH  
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>1hh8A

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VVASVVDQDS



VLGKPQTDPTLEWFLSHCHIHKYPKSTLIHQGEKAETLYYIVKGSVAVLKDEEGKEMILSYLNQGDFIG  
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>1i8dA

MFTGIVQGTAKLVSIDEKPNFRTHVVVLPDHMLDGLTGASVAHNGCCLTVTEINGNHVSFDLMKET  
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>1ii6B

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EYQILEKGAARTTAATLMNAYSRSRHSVFSVTIHMKETTIDGEELVKIGKLNLDLAGSENIGRSGAV  
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>1iirA

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LQPTDLDAVQTGAWILPDERPLSPELAAFLDAGPPPVYLGFGSLGAPADAVRVAIDAIRAHGRRVILSR  
GWADLVLPDDGADCFAIGEIVNHQVLFGRVA AVIHGGAGTTHVAARAGAPQILLPQMADQPYYA  
GRVAELGVGVAHDGPIPTFDSL SAALATALTPETHARATAVAGTIRTDGA AVAARLLLDAVSREKPTV  
SALEHHHHHHH

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>1iq8A

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VKELEITLSRAREAEEIKEIPMNATIQQSTYTDLRRYAARRLSSMNFEIHPIGGVVPLLESYRFRDVVDIVIS  
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DFKIEKPTKEDAIKYVMAIAEYQFGEASRAFDDAKVELSKTGMPRQVKVNGKRLATVRADDGLLTLG  
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>1iwmA

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>1j27A

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>1j74A

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>1j8yF

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>1jccB

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>1jfaB

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HFENVLRHFPGFCSLNLIRSTLDFFEGCWIEQYNFGGFPSSHYPQLRMMNGLGHCVGASLWPKEQ  
FNERSLFLEITSAIAQMENWVMVWVNDLMSFYKEFDDERDQISLVKNYVVSDEISLHEALEKLTQDTLH  
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PERRILTYGADIPLGGMHREDRLPALDVTLAHDMATFDGLNEMSPVLSTLAGHWTHPYWDREVL  
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>1jl3C

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>1jmvD

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>1jp3A

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