

# 과제5

<문자열 정렬하기>

20206147 서은서

## <목차>

1. 문제 내용과 해결방안
2. 결과 캡처

## 1. 문제내용과 해결방안

### 1) 일반 배열

먼저 문장을 담을 [100][51]배열을 생성합니다. 문장의 길이를 랜덤으로 결정한 후 그 길이에 맞추어 배열 안에 'A'~'Z' 사이에서 랜덤으로 집어넣습니다. 추후 문장 정렬을 실시합니다. 만약 첫번째 문장과 두번째 문장을 cmp를 통해 비교했을 때 0보다 크다면 둘의 위치를 바꿉니다. 이를 100번 반복합니다. 그리고 2번째 문장을 같은 방법으로 100번 반복합니다. 이런 과정을 97번 더 거치고 나면 문장이 정렬됩니다.

### 2) 동적 할당

먼저 문장을 받을 배열과 동적할당을 통해 만들어진 공간 만큼을 저장할 [100]포인터배열을 하나씩 생성합니다. 문장의 길이를 랜덤으로 결정한 후 그 길이에 맞추어 추후 이 배열에 'A'~'Z' 사이에서 랜덤으로 집어넣습니다. Malloc을 통해 이 문장의 길이 만큼 공간을 할당하여 주고 이를 포인터배열에 저장합니다. 이 동작을 100번 반복 한 후 문장 정렬을 실시합니다. 만약 첫번째 문장과 두번째 문장을 cmp를 통해 비교했을 때 0보다 크면 포인터 배열의 위치를 바꿔줍니다. 이를 100번 반복합니다. 그리고 2번째 문장을 같은 방법으로 100번 반복합니다. 이런 과정을 97번 더 거치고 나면 문장이 정렬됩니다.

## 2. 결과 캡처

배정 전 : 저장 방식

```
1 : RNMFRBMNKEWGAZTOYRXVQIKXKQSZOQKXHBBVGFZIRVVGZ
2 : XOYRXQTKUI CGXZAJKZHWN YAKMASHHV
3 : TKXZEF SUZQTWUHXEOGOWTKFDCKIFYDCXARPXUYBFARZMSJ
4 : UTIDYERD ICJBFENAQSBFMPQVISTVXKYTSTHAC
5 : LCVBQASEOTFRTSVCXBGZWTCYIYJPVQZBSRAPSZ
6 : FHAFWQGW I WLL VXEENMGQPNJEVUWAXXECLNXSCCNHAYA0BW
7 : BWWQBGTNRMFABFHMPCGY00WVZOUUGLHENECP
8 : EECTLJYLUSIKHDPAXJQZRJKVNPWJMPJHTMEDDHYDURZJSPXWVM
9 : PVXDWHYNKOBQMOVNKCJNVPUQRQUFRFMJVXL TZKF
10 : QRHNJ I HUO I ZJCOYKOMGEMTJGWLWFLCV
11 : QKSGVXXZUYQQEFTHFDK I WWRFI QJSQYBLW
12 : VNVGMC SYXEQIXJMLNQQKRRWOCEDJHFUF AHLHYEPF
13 : AAWDXHRNSTLXBEG LDE I AEEGQBKAHSAN
14 : CIDBU IOWOKTVFHQTGKUESDVAYTXFXPXVYDRHBZAHSLAK
15 : GUHLSOCKUFADWWGQRBZNCDWJJCWDEGKYBE
16 : XKQQSQYUGGKHENKPOUPAORGVOELPUFEFSVDY
17 : TVSNYOBOLKDTOYZQWJZASGXOQFLJGEZRKGTJSWADTMGMA
18 : SZWUOASVHHPFHTZHFKPJWEJJSCFUGA
19 : ESQNEWKVL0MRNYVANKFBFYTZTTRHPXTEFT
20 : QGIAZWYLUHGUJDJLCQFLA0JRBESAULWCIGFFNF
21 : FWKUOWL YTRLNMMRNDARCRZWF GZJHDHPOXRRTZUKKQYGI TG
22 : DMCUVAYJMX TZTILHWKACZYAEKWIMCBRBJJYNCXOSGBAKJ
23 : TYJCQXTHLFOPUUQJCYZGNMZNBZUOVKAL
24 : DBBXAHTQNRSSNBKSPVETUXYUMALVCYMAGPPYVTODYUSGA
25 : FJPPPGDQCOFLFSVBLFDHMMWRSXBWYZRTBSSSTOFM
26 : IWWBQBVMKP IADGBQLEYREBOJFDBWYBY
27 : FGQIEZINSGF SFFZH ZMTCEPHGJHQ CQXGZUOZKUNOICEKJCEPNBN
28 : ZCFXJXCFDXVCZSTSUTURSQENCLXPW SVGAWJOGGLAEZFOC
29 : NHCNWC LFKVDGZGJHRVQTBHZAGZKOPLUOWHGUJVUUJMFA
30 : YXGHNP EENYLPOMHXGPPRAIBJKNUVSBWX
31 : PRRTKI I KLKMKRDUDICVDFLYQIPDLFVRBHGTBRL
32 : VOETSENQBJPBDJGLNNVXCRBEOTVWEL00EXOTSZG
33 : IVPNFVHCGR LZVMFOX MN PQSFL OF GYYXEXXMEZENEJHQHWF C
34 : CBYJHNQFTAQAXZBOMSPEDNTMBEYVASZOMDWK
35 : CHCLROQV I PYCBZNKKKOKPUSIQXXJTLZVT KUTLUTLN
36 : KSAKXZJAZBEVZRNHEEDNIUVPQYXOQKVCXGLAT
37 : PAHAQHECNDXTPYRTRFMKIPVWUKDJMVAXAQMI
38 : VDOADGXFSJJPMWGNUE TYFCSXQFKHR
39 : TNGEWXZWNHUDYXREJHFZFXBOGPRXTRTULHXBZBAZGUOMV
40 : CDOBBKMIPOJUQXOXJZCNH DJVDYNXGHAJZIELPNHYANGDMB
41 : VFJBRNQDSKVUQWANWAMNRRGGTODBKEIPSHWTFVXAUROGHMJOS
42 : GVO RBKEAXCGWHBGBPFEVZPYNAUTHSI
43 : CVEHJWTCJQETBKMBMOKGCQAYOGLAQRDLP EWUJJMMPVU
44 : NEWDJESUBMEMHVGW XENQPFRCNNMBKKCBNLZBCN
45 : VSUBWZYPOXRCYJZPPOSENZWRBCVAMOADWNGTAICCLFIOMDUYS
46 : QNWNFJYWOKBRESXFGXDNVMGKAVNODICUHM XJKJOGKES
47 : BGN I VLJ I JVWGEDTRPJJLTJQNUYNZAMFNNAZQA YHWE I IK
48 : GAGZPTLHIQSCYBZHRJSC EGS LQESGEBDZKTUJRAWBGGHFYORA
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49 : VNONGOKWGCEDZWPPRPWKNIPITIXOOKPAJZSD  
50 : KVYTGVEYWAPEYWZGPCCRDWMDRGNSYHLZJRQLIWUFHYL  
51 : WEATHLYVGJMXPTUQKZXNSMBBVNUWSYHGDUOTPDJOFJOR  
52 : JQHZCQVKHIJXRBKLNSTPPAZKBYZBIOTCXWII  
53 : UYUCVPWSPUIAHWFKEKFSEYVMUMVZRQRSJFABFYN  
54 : CRZIMOUXXOXBGOUQGJHXJSTLSAQYENUT  
55 : NYAPRJDAKZZQHYHKVGFGIRNMVLARMVOBXT  
56 : XGTCABZVDVCGDUKQCJEPWWZPDQHVNUSXOACQWYGL  
57 : HQWMUJVZJYOIBVUVVURBGUQNOISDIJDARTNTHQGZPJWASZ  
58 : XRCRNQCYILEBEYYWDVSGBOQQFPXLQSSBYRETHGBYFFR  
59 : GWMEEZQGNKDSCEQZPTUKMKUFGNLRCPWKNMAEVTIPKYTPM  
60 : PDZA00SAKBNMEYVQTTJSRCEGHSONUE  
61 : IUCSRTPKJHVKMAQRDTFEINNMVUHVTXJJF  
62 : BXQIPBKWKEBDYAYCPJSUUKMMSDGCNYVVGXDZLNMVPCNUFOB  
63 : GETUPECDIZEVICBVLDECGZOTUKQSONTCOPPC  
64 : ZRXXGWHKXKXJCGRSXDXDZIPXFWXEWOLGAGQMSTJTEQE  
65 : UQWRKUZBODBLFVKGTYZOTQMPESHAGRJANLNFXYLBFEGC  
66 : KAFTELBPUIAZEWOKEMGKJCAMJESYRJUXOAG  
67 : TQBPDXTMNPWOATHPXUMWUQIROCQCNOYAXEMX  
68 : KSKPRQOFDDQQKJTWYXVRYQXZUKJFECHUL  
69 : EBJOTUSALTHGRKCIIPZRYMTZWPMHEARFVPEWP  
70 : TFGDKATMDGFWXQOVVYSJCSSPBGJRHEK  
71 : LNEGBZXRPDGRKKEQILGNCEESGVWUZHSMHEGEVLPYLNLT  
72 : VMQALMKSEDASIJRYUDDVIMWQUHLMUIVYWPHEIQITMTARRUZ  
73 : JTYVBRHGZZGUNKUTFYABPYERYQIGWSNLK  
74 : ZWHURXBIVYZEENNNZHLQKYAZBWNMGVKFBAY  
75 : TUJABAYEVPZEONVQNSMEXNICRJFHDJSRCQMPYNHHCBBYBPOTWV  
76 : SBMYRGQHRSHWEURCXPOTOSJPRQSEIXOCXZDJOAO  
77 : IQUQIPAPTZGZZDYQJSXQWQMFVUMEEXYZ  
78 : TALFMNWFQQURQQMQYOMTZKJJQLXAKQBWHHRJ  
79 : IYUWHCMQKXOZIKHBBCJLDTXDTPKOQDEWF  
80 : UCSKHCIVVAPMEQVRVSXPMLGUWHODKQAKQEQLJPQNXAFSGIMZSQ  
81 : LZFNWRXMKPHAGGZOEXKKDOSIGGRHMZJXBTUHFHSVW  
82 : EINHFFYYHUYEYVZFBGRDMBIRLPBWUMVMCEMKWKNQVRMJQTZKV  
83 : GXBIBWSKPGZRLIOIHSWUYPTTVFLSGXOLWMBATKE  
84 : GPYGFMIQDSTBEYNCECGRUEGHMZDRMDTFSGRIBCBPAGLDXVX  
85 : ENAHUZAQQMHADJJACJROJTOGWHEGPIKUBOPCYJPDAEKRJ  
86 : FFAMPTRZTTFZNYKRBIFACXHDOZAFONWEALMWKZ  
87 : RKTGJHMYLSPIGCLHNJVOPVLOECBKHWBMHXBZ  
88 : CNSYOSKHUIVSQOQSKYRVBBLECYBMCVFCRAXUMNMJGRXWNRWMKP  
89 : SYYCHRPBUCPNLHTZCDVHWGHRXUXFBZBUSWHKSLEOVF  
90 : AFKAMQQJFLFYRQXJGLXMEVDYOUFSMWCPMBQBURFBDLUIBKOIB  
91 : VPJLOEMDENYQDPUQFBINGEKCIEFLRXZFGDSROWDDEZZE  
92 : HSKLOIBNWDSWIEQDHJJJRFWCSPATEWQDJSZWMBW  
93 : MDUNHXKXHBAXGYGQSLZRYEOMPTHWKCJ  
94 : NMSZCGZNLXLCCDBIKXUMWHDXDGZOSPRBNTZTBJWPK  
95 : ZMSCVOSENJDAEWWWMLRUWRFSATVIGWSXMTSYSGGDNNZEGOKS  
96 : KITYQCNNKECTRRJCFONDEPGFIBGWCTF  
97 : GRFGARRIKXDDMZSWZSLXTXUXKFRUJAJWHCDMU  
98 : JSWCQVJIOGHNLKTYXYRJKWKLWTGMHBWGS

99 : LUYOU MBHUTKNJCJEVQBUJRKCJFKAUJTVBOLTCPXLTV EKZ  
100 : ZAYOUW XVNNDZBNJFPVTHUPTTDYUWNVKUYEFIHLCAVW

정렬 후 :

1 : AAWDXHRNSTLXBEG LDEIAEEGQBKAHSAN  
2 : AFKAMQQJFLFYRQXJGLXMEVDYOUFSMWCWPMBQBURFBDLUIBK OIB  
3 : BGNIVLJ IJVWGEDTRPJJLTJQNUYNZAMFNNAZAQAYHWEI I K  
4 : BWWQBGTRNMFBA BFHMPCGYOOWVZOUJGLHENECP  
5 : BXQIPBKWKWHEBDYAYCPJSUUKMMSDGCNYVVGXDZLNMVPCNUFOB  
6 : CBYJHNQFTAQAXZBOMSPEDNTMBEYVASZOMDWK  
7 : CDOBBKMIPOJUQXOXJZCNHJVDYNXGHAJZIELPWNHYANGDMB  
8 : CHCLROQV I PYCBZNNKKKOKPUSIQXXJTLZVTKUTLUTLN  
9 : CIDBU IOWOKTVFHQTGKUESDVAYTXFXPXVYDRHBZAHSLAK  
10 : CNSYOSKHUIVSQOQSKYRVBBLECYBMCVFCRAXUMNMJGRXWNRWMKP  
11 : CRZIMOUXXOXBGOUQGJHXJSTLSAQYENUT  
12 : CVEHJWTCJQETBKMBMOKGCQAYOGLAQRDLP EWUJJMMPVU  
13 : DBBXAHTQNRSSNBKSXPVETUXYUMALVCYMAGPPYVTODYUSGA  
14 : DMCUVAYJMX TZTILHWKACZYAEKWIMCBRBJJYNCXOSGBAKJ  
15 : EBJOTUSALTHGRKCIIPZRYMTZWPMHEARFVPEWP  
16 : EECTLJYLUSIKHDPAXJQZRJKVNPWJMPJHTMEDDHYDURZJSPXWVM  
17 : EINHFFYYHUYEYVZFB CRDMBIRLPBWUMVMCEMKWKNQVRMJQTZKV  
18 : ENAHUZAQQMHADJ JACJROJTOGWHEGP I KUBOPCYJPDAEKRJ  
19 : ESQNEWKVLOMRNYVANKFBFYTZTTFRHPXTEFT  
20 : FFAMPTRZTTFZNYKRBIFACXHDZAFONWEALMWKZ  
21 : FGQIEZINSGFSFFZHMTCEPHGJHQ CQXGZUOZKUNOICEKJCEPNBN  
22 : FHAFWQGW I WLLVXEENMGQPNJEVUWAXXECLNXSCCNHAYA OBW  
23 : FJPPPGDQCOFLFSVBLFDHIMWRSXBWYZRTBSSSTOFM  
24 : FWKUOWL YTRLNMMRNDARCRZWF GZJHDHPOXRRTZUKKQYGI TG  
25 : GAGZPTLHIQSCYBZHRJSCEGSLQESGEBDZKTUJRAWBGGHFYORA  
26 : GETUPECDI ZEVICBVLDECGZOTUKQSONTCOPPC  
27 : GPYGFM IQDSTBEYNCECGRUEGHMZDRMDTFSGRI BCJBPAGLDXVX  
28 : GRFGARRIXDDMZSWZSLXTXUXKFRUAJWHCDMU  
29 : GUHLSOCKUFADWWGQRBZNC DWJZCWDEGKYBE  
30 : GVORBKEAXCGWHBGBPF EVZPYNAUTHSI  
31 : GWMEZEZQGNKDSCEQZPTUKMKUFGNLRCJPWKNMAEVWTIPKYTPM  
32 : GXB I WSKPGZRL I O I HSWUYPTTVFLSGXOLWMBATKE  
33 : HQWMUJVZJYOIBVUVURBGUQNOISDIJDARTNTHQGZPJWASZ  
34 : HSKLOIBNWDSWIEQDHJJJRFWCSPATEWQDJSZWMBW  
35 : IQUQIPAPTZGZZDYQJSXQWQMFVUMEEXYRZ  
36 : IUCSRTPZKJHVKMAQRDTFEINNMYUHVTXJJF  
37 : IVPNFVHCGR LZVMFOXMN PQSFL OFGYYXEXXMEZENEJHQHWFC  
38 : IWWQBQVMKPIADGBQLEYREBOJFDBWYBY  
39 : IYUWHCMQKXOZIKHBBCJLDTXDTPKQQDEWF  
40 : JQHZCQVKHIJXRBKLNSTPPAZKBYZBI OICXWII

41 : JSWCQVJT OGHNLKTYXYRJ KWKLWTGMHBWGS  
42 : JTYVBRHGZZGUNKUTFYABPYERYQIGWSNLK  
43 : KAFTELBQPUAZEWOKE MGKJCAMJEJSYRJUXOAG  
44 : KITYQCNNKECTRRJCFONDEPGFIBGWCTF  
45 : KSAKXZJAZBEVZPNHEEDNIUVPQYXQKVCXGLAT  
46 : KSDKRRQOFDDQQKJTWYXVRYQXZUKJFECHUL  
47 : KYYTGVEYWAPEYWZGPCCRDWMDRGNSYHLZJRQLIWXUFHYL  
48 : LCNEGBZXRP GDKARIKEQILGNCEESGVWUZHSMHEGEVLPYLNTL  
49 : LCVBQASEOTFRTSVCXBGZWTCYIYJPVQZBSRAPSZ  
50 : LUYOU MBHUTKNJCJEVQBUJRKCJFKAUJTVBOLTCPXLTV EKZ  
51 : LZFNWRX MNKPHAGGZOEXKKDOSIGGRHMZJXBTUHF XI SVW  
52 : MDUNHXKKXHBAXGYGQSLZRYEOMPTHWK CJ  
53 : NEWDJESUBMEMHV GWXENQPFRCNNMBKKCBNLZBCN  
54 : NHCNWC LFKVDGZGJHRVQTBHZAGZKOPLUOWHGUVVUJMF A  
55 : NMSZCGZNIXLCC CDBKXUMWHDXDGZOSPRBNTZTBJWPK  
56 : NYAPRJDAKZZQH YHKVGFGRINMVLARMV OBT  
57 : PAHAQHECNDXTPYRTRFMKIPVWUKDJMVAXAQMI  
58 : PDZA OOSAKBNMEYVQTTJSRCEGHSONUE  
59 : PRRTKI I KLKMKRDUDICVDFLYQIPDLFVRBHGTBRL  
60 : PVXDWHY NKOB AQMOVNKCJNVPUQRQUFRFMJVXL TZKF  
61 : QGIAZWYL UHGUGDJLCQFLA OJRBESAULWCIGFFNF  
62 : QKSGVXXZU YQQEFTHFDKIWWRFIQJSQYBLW  
63 : QNWNFJYWOKBRESXFGXDNVMGKAVNODICUHM XJKJOGKES  
64 : QRHNJ I HUOIZJCOYKOMGEMTJGMLWFLCV  
65 : RKTGJHMYLSPIGCLHNJVOPVLOECBKHWBMH ZBXZ  
66 : RNMFBRMNKEWGWAZTOYRXVQIKXKQSZOQKXHBBVG FZIRVVGZ  
67 : SBMYRGQHRSWHWEURCXPOTOSJPRQSEIXOCXZYDJOA O  
68 : SYYCHRPBUCPNLHTZCDVHWGHRCXUXFBZBUSWHKSLEOVF  
69 : SZWUOASVHHPFHTZHFKPJWEJJSCFUGA  
70 : TALFMNWFQQURQQMQYOXMTZKJJQLXAKQBWHHRJ  
71 : TFGDKATMDGFWXQOVVYYSJCSSPBGJRHEK  
72 : TKXZEF SUZQTWUHXEOGOWTKFDCKIFYDCXARPXU YBFARZMSJ  
73 : TNGEWXZWNHUDYXREJHFZFXBOGPRXTRTULHXBZBAZGUOMV  
74 : TQBPDXTMNPWOATHPXUMWUQIROCQCNOYAXEMX  
75 : TUUABAYEVPZEQNVQNSMEXNICRJFHDJSRCQMPYNHCBVYBPOTWV  
76 : TVSNYOBOLKDT OYZQWUJZASGXOQFLJGEZRKGTJSWADTMGMA  
77 : TYJCQXTHLFOPIUJQJCYZGNMZNBJUOVBKAL  
78 : UCSKHCI VVAPMEQRVRSXPMLGUJWHODKQAKQEQLJPQNXAFSGIMZSQ  
79 : UQWRKUZBODBLFVKGTYZOTQMPESHAGRJANLNFXYBFEGC  
80 : UTIDYERD ICJBFENAQSBFMPQVISTVXKYTSTHAC  
81 : UYUCVPUWSPUINAHWFKHEKFSERVUMJMVZRQRSJFABFYN  
82 : VDOADGX XFSJJPMWGNUETYFC SXQFKHR  
83 : VFJBRNQDSKVUQWANWAMNRRGGTODBKEIPSHWTFVXAUROGHMJOS  
84 : VMQAU MKSEDASIJRYUDDVIMWQUHLMUIVYWPHIEYQITMTARRUZ  
85 : VNONNGOKWGCGECDZWPPRPWKNIP IIXOOKPJA JZSD  
86 : VNVGMCSYXEQIXJMLNQQRWRWOCEDJHFUFAHLHYEPF  
87 : VOETSENQBJPBDJGLNNVXCRBEOTVWEL O OEXOTSZG  
88 : VPJLOEMDENYQDPUQFBINGEKCIEFLRXZ FVGDSROWDDEZZE  
89 : VSUBWZYPOXR CYJZPPOSENZWRBCVAMOADWNGTAICCLFIOMDUYS  
90 : WEATHLYVGMXPTUQKZXNSMBBVNUWSYHGDUSOTPDJOFJOR

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91 : XGTCABZVDVCGDUKQCJEPWWZPDQHVNUDSXOACQWYGL
92 : XKQQSQYUGGKHENKPOUPAORGVOELPUFEFSVDY
93 : XOYRXQTKUICGXZAJKZHWNYAKMASHIV
94 : XRCRNQCYILEBEYYWDVSGBOQQFPXLQSSBYRETHGBYFFR
95 : YXGHNPEENYLPOMHXGPPRAIBJKMNJVSBW
96 : ZAYOUWXVNNDZBNJFPVTHUPTTDYUWNVKUYEFILHCAVW
97 : ZCFXJXCFOXVCZSTSUTURSQENCLPXPWSVGAWJOGGLAEZFOC
98 : ZMSCVOSENJDAEWWWMLRUWRFSA TVIGWSWXTSYSGDNNZEGOKS
99 : ZRXXGWHKKXYJCGRSXDXDZIPXFWXEWOLGAGQMSTJTEQE
100 : ZWHURXBIVYZEENNNZHLQKYAZBWNMGVKFBAY
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## 포인터 저장 방식

정렬 전 :

```
1 : WHOHLQG IACGNPVISWBQEOZMLCARXEG
2 : JDOFTYLEKCHFRSRLLFRFFZOXP TLLQCYWQJ IUULR
3 : HQFCGNWLXVGAWZDCBYLNFVXWBIEHQHOPTUNB
4 : BLDOLRSJXXDHQLTJBKZZGDZPSFLPJSAFDMFN
5 : WZDCHPEGQDIXKLUCMCABUZNILBLGWKBH
6 : CIBWSJWELIJEUXOPLYQEFDYXSUJQDONIUOXTKIRPZIK
7 : OQHEJIBEHXYCHQSQYUUKDCQUJNVVWFWNFCHMUHQTVRGRTY
8 : XHWTNMRFPAGEDRDDKECCBDJEQCSHDAFQQNQLUFEGLNAU
9 : UMGETMZCZHQDOWDRCJAUCLYRBGP GFVDWGUPXTFPRQTZD
10 : WHPTMFNYSJWKMLYHMOIWUIFXGKWSEEBNIQHSIQUIVAYI
11 : ONKZKGOTTYZBBI XWPOLINAPUWQTOIYFEKKYLALIHGP
12 : FKHZNRIQWDCTJGIYBXXHWZXUJQQHSFZQPYSBWKKKUEWIFYVD
13 : PASHAZSUYWASCCPTDWECSLTDNXAHKGEZBCY
14 : DGTSDDI ZNFNZPJRDUXVATBERZSYARVUZXJGWMMGGNKLVS
15 : PRNCNLNRQOVHUSWTBRFXLQPSFWDL PBOOK
16 : NNLOIJIJWJEWVNYHKUPIRFHGH SXZQQOPLFDREOTVOY
17 : KBVZWQPLHSXVTBWUGKNGTJVDIBMCTTPNTHGDGYKXCZGAHY
18 : TRLESONSUVFHHYZFYLDUAPZTPHSTCP
19 : EQMWAVOAERKCEDTWNVNXAZEKJB JQWYSNJAFFRFV OYRGLSP
20 : GRLNOFWNCOWACLDDOYIRCPXIYJPAUSIOTKAWAHXYVKKOO
21 : VCCXVNFJALEUIUMAFMOZXFEFFGUQLZFYGFL
22 : BRIENJZVGN OXVWZBAUYTAOMKWNBCLYZKEMYGOQIFDOLSI
23 : ZTINANFYCVZBZUNFLLNUBZCMRXAZHS
24 : KHOOPJMSTGNSPCXWKDIWJYMVDBEIJRVEPCLDFZSVXD
25 : YZEKQRWDHBBMUCOUSGQJPIHLTQSNJEGOFVQGAOYHYCXADQCG
26 : BBAFROAHMIRWDQUBSSNFVWPKATVBWRKSRWWOFP GMLAC
27 : QOUPJGWCCCLNVBOHGFYXIDDXCRXRAUCP
28 : NRIUYZXOKMZHRDBWERUWZQQBJQXSSATNXKOOJUMKF
29 : PQEIAIAAVZTEFPNSSGAOINYM HGBQWDPDQCXFUVVPQFGXR
30 : QJCCNMWHALBGFPUBBRMTBJDYVONGWXB
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31 : NCJCVKMAVRFIHHSLPCYKLHULGFUJYHBKQQHP  
32 : TNRKEGGCUQXJXKUVJNMIDNBSXCLYGDNLLFQAWQGOJJGRZA  
33 : AADRTBNPZQXNJXWWUOTQJGFRIZSLJBDKBYOMLJHXGGPE  
34 : YVYDXWSDRRHRFEMDFDHSQGCSOHJMDPXRNKQXXJCEHQSPSOJ  
35 : FDZWDYLCWFCCDOFABLKKGXXJLJQPLAWEBMXCHRPWKXIRFLD  
36 : KIHHPLEPIATBQTAGAFPUAZWYYIEBARPDKMV  
37 : KPVDXVIUJILGQDVVKPLVSHVOZXKORQGGXMMQVJ  
38 : GGI DLSGQNVGCUJNKAWUTSKOBXGOBGZZUWZL  
39 : BWLSCBCOTSFZGPDJATAWPLZFFJPYJFDHCFGYGCGWNLV LX  
40 : MTEWSFQSMRI VHDVDZAJTXFWXASKTBMOIDSA  
41 : HPHCTCUTBAVDBWVPDEOAIDPF00XXDVKETQNR  
42 : SSQEGBATGBQBUZAIITQYIGNHJNL MNODHOQKXOFQHSWZXKUMK  
43 : UZTIGPRVMJBVWZGSEHAPSI EYEDELCLIFSMHCCRLZWR  
44 : NUNSGFUWGXMDMZOVCWSTFLPZTQCSXMUANOXYEIEOTMMWHQUVX  
45 : XSODXQSDJUOQZZCOWWXJODRGELLRLMYQJCMTLW  
46 : TAGMQDLWDEZPZYBMLHKS IKRCQTLGAM  
47 : KNTHQISZMRCYYTUSIVIGZ IABNECOEAEYXKSFAVX  
48 : EKOZWBXYTHMBSYKYTFJPGNGYODVSOBOBJ  
49 : VLRCYFAJFFODNYRWREKNMKSUKATNQCNWORSURXQEAZRDH  
50 : IORLNHSDUSKCIQBGQZWUUKMDBNLNZFPMEINZMQIISAHKE  
51 : WOZVMZKUSWHOVQEWGKSVQGDNHZBUQWDH  
52 : BJYJYCFFGFDOSTIXTILELTASZCJUMXXSRLVKBSK  
53 : FSSDLQWEMTMEVFIUGMHDLQVTYECFKVFYUFLVDGKMNPWP  
54 : RDSLGTIKYBUMXKHNEBHAPSEAEUKATONYTD  
55 : GCPCTSQQTHZXTIBMBAPUYFTFJJOWYXIDSOISD  
56 : XLQFVBZNHWYERLAHMAFBFZFNLSDBFCNQHWP AZLZMMNVI  
57 : EXPDPUZQTFITYVZNEASYVIXDOYHLWBVFQSDV000HADCXRJCOH  
58 : ASWHWBHFHSLYCNYNHUVGGLTZFYOLNDODUGSPOEKSBUJKAHFC  
59 : RKCPITWUPKCMKSTJTWFDLEMYIFLQOJZMMA  
60 : OXQVJJFRVSKLMZRUIUUFFPAXXUHZDHG  
61 : PNHEBLEJQNSXUJPQFGWNUJ KALSEMOK  
62 : FMZIGKBYOCJZXRAKVINIKLUEYAYXYJMVLE  
63 : SIQMBNYUSHXCVWUWVCYOOTRSJCZOJIOAHLCPRIHFZPFBAOC  
64 : VVRDEQRNEEDTVVCWQGZTOEYPPZPHI  
65 : YDTIKQPLHFBSVDLZOZRWYBOHHGJZOVOZVFXNPOWG  
66 : NIXVCEMDLYQBWTVJSWTCJFNPLJXJKMBZIJGV  
67 : KKFCLNNDLEZJKQRTZXGIVGFKGNEFWFYSRCKSCJOESV  
68 : XOMOGIIKPGKDGUCTQSQPRFNUJCHQUJZJAUEEYBTDGWM  
69 : CAVSNVSOBAKIJCHSDLVTAOALTYCDJDLXZKZA  
70 : ZTQCMEDCPCXQQIFVDHGJPF AFUXIXJZANFMPJPJVMTXNESO  
71 : BNSEQYKYJUMINYFANMPHVNKEDWFJHGKDOWB  
72 : NUFPDWHDWZTGTUFNECAGIZHCFQCQFHTUJDHSAUWCIOJIN  
73 : NRAKBVQCWKETZUEQJQCEOYMCCXVRLLEI HUJR  
74 : NRJKSWHICFJBNWVLRGMPSPEMVURFDLUKPD MVGDFI  
75 : NOJYLOJZQDPKASCKXVIMDSUCWFHEMYJERVRTKI WUH  
76 : YWIBVZRQNHLLBLTRCAODAOIGVDKUCHIGWHX MVOUTMDA  
77 : IWL YUPTNDBKNJNHAWRJRGHVMOMXC VSWBHSVXCKD  
78 : CIRUXMQCOVSHGOYCHUANAOWFGTTZZBPNDXSVR  
79 : RVROPSCWZOFOXWYCCCCONAXEDJLINLCYTCEFU EPYQSRPLE



80 : XTRTOHQPCGXKHPREULAQGLTIGZHQPYMYCBCGSR  
81 : QKCHUECWSEFRUDYFOQYLPLIAIFWDHSCZVDVPOBWDDYZQZAUYBX  
82 : QQULAPCILDRATFGYNREZBKRWHCGVUKNRFGONOVISKGEKKJ  
83 : GOTXBAWPYPPTFJMBNFZEJRPCCCKWNBZDOHBO  
84 : JSKTQFRXURAQJNNDSALZNTWXXSUEIAPPYJNOSXYRGV  
85 : EAYLFKWWNIAPKELYONFJSUWVOVDCBCZEGPGICYOABIXH  
86 : GTCKFHOKRTIHKGCFKHFNFYHOLPSUVICNMEFZAFWMMWDKDKD  
87 : FFMXZBRIQGVBDWFECMYKSODMGRGKBCWGYQFCEU  
88 : EULJEYGMFIDZPDZBSGXHFOWTKPGIUO  
89 : MYMJQPZCYCQSVJMJ00QLERUPASMAUHPXYGMKEYNYPJ  
90 : VNLWTBHMMQZJPXUTLMONGJHELJQMXA  
91 : RXNBJFTFEROFGHJKFESDHQIFNZWLIGQBjqPE  
92 : EKDPRAMHTPMXWTPKDCNRAVXJYGN00SDZUJGZPIKXIDJGNAX  
93 : YOEUJGNHDDZGVXHFUWBUJQDNNNQVIBXAGL00KZC  
94 : OBRBZHOTVFBVHYEVZNVLHSCFWWIHSWMIAMFYM  
95 : RNRRLXMTIDWEXKLBLTLNLSMMVWENJEPZCQJFKHCIH  
96 : JWVIAQJZMCWPGCKQDSLLEVQTHXLEJMSMQERYMBDRHFASBY  
97 : KIEVRXLLXIERVGNBYRKUCDILVROWOTGGHFYHERY  
98 : SVEQBPJKAWDRHKGRQBBKTBRMXACOWUJZ  
99 : BYTYDPOMHPZYODJSNUGBUFXRABUQNKGBJZQYLHRFHEPVHKI  
100 : OXUPQBKCKQXGUFNJPANNRQDTHQLDZXCONKIPESHKKWCX

정렬 후 :

1 : AADRBTNPZQXNJXWWWJOTQJGFRIZSLJBDBKYOMLJHXGGPE  
2 : ASWHBHFHSLYCNYNHJVCGLTZFYOLNDODUGSP0EKSBUJKAHFC  
3 : BBAFROAHMIRWDQUBSSNFVWPKATVBWRSKSRWWOFPGLAC  
4 : BJYJYCFFGFDOJSTIXTILELTASZCJUMXXSRLVKBSK  
5 : BLDOLRSJXXDHQLTJBKZZGDZPSFLPJSAFDMFN  
6 : BNSEQYKYJUMINYFANMPHVNKEDWFJHGKOWB  
7 : BRIENZJVGNOXVWZBAUJTAOMKWNBCLYZKEMYGOQIFDOLSI  
8 : BWLSCBC0TSFZGPDJATAWPLZFFJPYJFDHCFGYGCGWNLVLX  
9 : BYTYDPOMHPZYODJSNUGBUFXRABUQNKGBJZQYLHRFHEPVHKI  
10 : CAVSNVSOBAKIJCHSDLVTAOALTYCDJDLXZKZA  
11 : CIBWSJWELIJELXOPLYQEFDYXSUJQDONIU0XTKIRPZIK  
12 : CIRUXMQCOVSHGOYCHUANAOWFGTTZZBPNDXSVR  
13 : DGTSDDI ZNFNZPJRDUXVATBERZSYARVUZJGMMMGGNKLV  
14 : EAYLFKWWNIAPKELYONFJSUWVOVDCBCZEGPGICYOABIXH  
15 : EKDPRAMHTPMXWTPKDCNRAVXJYGN00SDZUJGZPIKXIDJGNAX  
16 : EKOZWBXYTHMBSYKYTFPFGNGYODVS0B0BJ  
17 : EQMWAVOAERKCEDTWNVNXAZEKJBjqWYSNJAFFRFVOYRGLSP  
18 : EULJEYGMFIDZPDZBSGXHFOWTKPGIUO  
19 : EXPDPUZQTFITYYZNEASYVIXDOYHLWBVFQSDV000HADCXRJCQH  
20 : FDZWDYLCWFCCDOFABLKKGXXJLJQPLAWEbMXCHRPWKXIRFLD  
21 : FFMXZBRIQGVBDWFECMYKSODMGRGKBCWGYQFCEU  
22 : FKHZNRIQWDCTJGIYBXXHWZXUJQQHSFZQPYSBWKKKUEWIFYVYD  
23 : FMZIGKBYOCJZXRAKVINKLUEYAYXYJMVLE  
24 : FSSDLQWEMTMEVFUGMHDLQVTECFKVFYUFVLDGKMNPWP  
25 : GCPCTSQQTHZXTIBMBAPUYPTFJJ0WYXIDS0ISD  
26 : GGI DLSGQNVGCUJNKAWUTSKOBXG0BGZZUWZL  
27 : GOTXBAWPYPPTFJMBNFZEJRPCCCKWNBZDOHBO

28 : GRLNOFWNCOWACLDDOYTRCPXIYJPAUSIOTKAWAHXYVKKOOF  
29 : GTCKFHOKRTIHKGCFKHFNFYHOLPSUVICNMEFZAFWMMWDKDKD  
30 : HPHCTCUTBAYDBWVPDEOAIDPF00XXDVKETQNR  
31 : HQFCGNWLXVGAWZDCBYLNFWXWBIEHQHOPTUNB  
32 : IORLNHSDUSKCIQBGQQZWLUKMDBNLNZFPMEINZMQII SAHKE  
33 : IWL YUPTNDBKNJNHAWRJRGHVMOMXCVS WBHSVXCKD  
34 : JDOFTYLEKCHFRSRLLFRFFZOXPTLLQCYWQJ IUULR  
35 : JSKTQFRXJURAQJNND SALTNTWXXSUEIAPPYJNOSXYRGV  
36 : JWVI AQJZMCWPGCKQDSLLEVQTHXLEJMSMQERYMBDRHFASBY  
37 : KBVZWQPZLHSXVTBWUGKNGTJVDIBMCTTPN0THGDGYKXCZGAHY  
38 : KHOOPJMSTGNSPCXWKDIWJYMYDBEIJRVEPCLDFZSVXD  
39 : KIEVRXLLXIERVGNBYRKUCDILVROWOTGGHFYHERY  
40 : KIH0HPLEPIATBQTAGAFPUAZWYYIEBARPDKMV  
41 : KKFCLNNDLEZJKQRTZXGIVGFKGNEFWFYSRCKSCJOESV  
42 : KNTHQISZMRCYYTUSIVIGZ IABNECOEAEYXKSFAVX  
43 : KPVDXVIUJILGQDVWKPLVSHVOZXKORQGGXMMQVJ  
44 : MTEWSFQSMRIVHDVDZAJTXFWXASKTBMOIDSA  
45 : MYMJQPZCYCQSVJMJ0OQLERUPASMAUHPXYGMKEYNYPJ  
46 : NCJCVMKAVRFIHHHSLPCYKLHULGFUYHBKQQHP  
47 : NIXVCEMDLYQBWTVJSWTCJFNPLJXJKMBZIJGV  
48 : NNLOIJ I WJEWNYHIKUPIRFHGHXZQQOPLFDREOTVOY  
49 : NOJYLOJZQDPKASCKXVIMDSCUCWFHEYMYJERVRTKI WUH  
50 : NRAKBVQCWKETZUEQJQCEOYMCCXVRLLFIHUYR  
51 : NR IUYZXOKMZH RDBWERUWZQQBJQXSSATNXK00JUMKF  
52 : NRJ KSWHICFJBNWVL RGMPSPEMVURFDLUKPD MVGDFI  
53 : NUFPDWHDTZTGU FNECAGIZHCFQCQFHTELYDHS AUWC IJOIN  
54 : NUNSGFUWGXXMDMZOV CWSTFLPZTQCSXMIANOXYEIEOTMMWHQUVX  
55 : OBRBZH0TVFBVHYEVZNI VLHSCFWWIHSWMIAMFYM  
56 : ONKZKGOTTYZBBIXWPQUNAPUWQTOIYFEKKYLALI HGP  
57 : OQHEJIBEHXYCHQSQYUUKDCQUVNVCFVWNFCMHUHQTVRGRTY  
58 : OXQVJ JFRVSKLMZRUIO IUFFPAXXUHZDHG  
59 : OXLUPQBCKQXGUFNJPANNRQDTHQLDZXCCNKIPESHKKWCWX  
60 : PASHAZSUYWASCCPTDWECSLTDNXAHKGEZBCY  
61 : PNHEBLEJQNSXUJJPQFGWNUJ KALSEMOK  
62 : PQEIAIAAVZTEFPNSSGAOINYM HGBQWDPDQCXFUVVPQFGXR  
63 : PRNCNLNRQOVHUSWTBRFXLQPSFWDL PBOOK  
64 : QJCCNMWHALBGFPUBBRMTBJDYVONGWXB  
65 : QKCHUECWSEFRUDYFOQYLPLIAIFWDHSCZVDVPOBWDDYZQZAUYBX  
66 : QOUPJGWCCKLNVBOHGFYXIDDXCRXRAUJCP  
67 : QQULAPCILDRATFGYNREZBKRW HCGVUKNRFGONOV IYSKGEKKJ  
68 : RDSL GOTIKYBUMXKHNEBHAPSEAEUKATONYTD  
69 : RKCPITWUPKCMKSTJTWFDLEMYIFLQOJZMMA  
70 : RNRRLXMTIDWEXKLB LTLYNLSMMVWENJEPZCQJFKHCIH  
71 : RVROPSCWZOF0XWYCCCFONAXEDJL I NLCTCEFU EPYQSRPLE  
72 : RXNBJFTFEROF GHJKFESDHQIFNZWLIGQBJQPE  
73 : SIQMBNYUSHXCVMUWVCYOOTRSJCZOJIOAHLCPRIHFZPFBAOC  
74 : SSQEGBATGBQBUZAIITQYIGNHJNL MNODHOQKXOFQHSWZXKUMK  
75 : SVEQBPJKAWDRHKGRQBBKTB RMXACOWUJZ  
76 : TAGMQDLWDEZPZYBMLHKS I KRCQTLGAM

77 : TNRKEGGCUQXJXKUVUNMIDNBSXCLYGDXXNLLFQAWQGOJJGRZA  
78 : TRLESONSUVFHHYZFYLDUAPZTPHSTCP  
79 : UMGETMZCWZHQDOWDRCJAUCLYRBGPGFVDWGUPXTFPRQTZD  
80 : UZTI GPRVMJBVWZGSEHAPSI EYEDELCLIFSMHCCRLZWR  
81 : VCCXVNIJFALEUIUMAFMOZXFEFFGUQLZFYGFL  
82 : VLRCYFAJFFODNYRWREKNMKSUKATNQCNGWORSURXQEAZRDH  
83 : VNLWTBHMMQZJPXUTLMONGJHELJQMXA  
84 : VVRDEQRNEEDTVVCWQGZTOEYPPZPHI  
85 : WHOHLQGIACGNPVISWBQEOZMLCARXEG  
86 : WHPTMFNYSJWKMLYHMOIWUJFXGKWSEEBNIQHSIQUIVAYI  
87 : WOZVMZKUSWHOVQEWGKSVQGDNHZBUQWDH  
88 : WZDCHPEGQDIXKLUCMCABUZNILBLGWKBH  
89 : XHWTNMRFPAGEDRDDDKECCBDJEQCSHDAFQQNQLUFEGLNAU  
90 : XLQFVBZNIHWYERLAHMAFBFZFNLSDBFCNQHPAZLZMMNVI  
91 : XOMOGIIKPGKDGUCTQSQPRFNUJCHQUJZJAUJEEYBTDGWM  
92 : XSODXQDSDJUQQZZCOWWXJODRGELLRLMYQJCMTLW  
93 : XTRTOHQPCGXKHPREULAQGLTIGZHQPYMYCBGSR  
94 : YDTIKQPLHFBSVDLZOZRWYBOHHGJZOVZVFXXNPWG  
95 : YOEIUGNHDDZGVXHFUWBUJEQDNNNQVIBXAGL00KZC  
96 : YVYDXWSDRRHRFEMDFDHSQGCSOHJMDPXRNDKQXJCEHQSPSOJ  
97 : YWIBAVZRQNHLLBBLTRCAODAOIGVDKUCHIGWHXMVOUTMDA  
98 : YZEKQRWDHBBMUJCOUSGQJPIIHLTQSNJEGOFVQGAOYHYCXADQCG  
99 : ZTINANFYCVZBZUNFLLNUBZCMRXAZHS  
100 : ZTQCMEDCPCXQQIFVDHGJPF AFUXIXJZANFMPJPJVMTXNESO