```
1 //[環狀序列/Circular Sequenc](1/2)
 2 #define IN "PO7IN.txt"
 3 #define OUT "P07OUT.txt"
4 //*******************
 5 #include <iostream>
 6 #include <ctime>
 7 using namespace std;
8 void redir(void);
9 //*************
10 /* Work Space*/
11 bool less(char *s, int p, int q);
12 //*************************
13 int main(void)
14 {
15
      redir(); //redirection
16 //*****************
17 /* Work Space*/
      int T;
18
19
      char s[101];//依題意
20
21
      int ans;
22
      int n;
23
      int i;
24
25
      scanf("%d", &T);
26
27
      while(T--){
28
          scanf("%s", s);
29
          ans = 0;
30
          n = strlen(s);
31
32
          for(i=1; i<n; i++){
33
              if(less(s, i, ans)){
34
                 ans = i;
35
              }
36
          }
37
38
          for(i=0; i< n; i++){
39
             putchar(s[(ans+i) % n]);
40
41
          putchar('\n');
42
43 //********************
      freopen("CON", "r", stdin); //取消重新導向
44
      freopen("CON", "w", stdout);
45
46
47
      printf("Time used = %.2f\n", (double)clock()/CLK_TCK); //傳回程式目前為止執行的時間
48
49
      system("pause");
50
      return 0; //the end...
51 }
52
53 void redir(void)
54 {
55
      freopen(IN, "r", stdin);
freopen(OUT, "w", stdout);
56
57 }
58 //****************
59
60
61
62
63
```

```
64 //[環狀序列/Circular Sequenc](2/2)
65 /* Work Space*/
66 //環狀字串s的標記法p是否比標示法q的字典序小
67 bool less(char *s, int p, int q)
68 {
69
      int n;
70
      int i;
71
72
      n = strlen(s);
73
74
      for(i=0; i< n; i++){
75
          if(s[(p+i) \% n] != s[(q+i) \% n]){
76
              return s[(p+i) \% n] < s[(q+i) \% n];
77
          }
78
      }
79
      return false;
80 }
81
82 //Input(IN) Sample
83 /*
84 2
85 CTCC
86 CGAGTCAGCT
87 */
88
89 //Output(OUT)
90 /*
91 CCCT
92 AGCTCGAGTC
93 */
```