17. (b) Test 17

Test Summary

- No. of Sections: 2
- No. of Questions: 3
- Total Duration: 45 min

Section 1 - Coding Proficiency

Section Summary

- No. of Questions: 2
- Duration: 30 min

Additional Instructions:

None

Q1. **Pattern**

Pattern Printing
Input: n=3
3 3 3
3 1 3
3 2 3

Input: n=4
4 4 4 4
4 4 1 4
4 4 2 4
4 4 3 4.

Input Format

Input contains n

Output Format

Print the pattern

Constraints

1<=n<=50

Sample Input

```
3
```

Sample Output

```
333
313
323
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q2. **String Rotation**

A Program to check if strings are rotations of each other or not
Given a string s1 and a string s2, write a programt to say whether s2 is a rotation of s1?
(eg given s1 = ABCD and s2 = CDAB, return 1, given s1 = ABCD, and s2 = ACBD , return -1)

Input Format

Input contains two strings

Output Format

Print 1 if two string are rotation of each other else -1

Constraints

1<=string_length<=1000

Sample Input

Sample Output

sample mplase	-1

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Section 2 - Essay Writing

Section Summary

- No. of Questions: 1
- Duration: 15 min

Additional Instructions:

None

Q1. **Essay Writing**

"Do u agree that younger people should not teach older people with example"

Directions

Write an essay for the given topics

Keywords

Answer Key & Solution

Section 1 - Coding Proficiency

Q1

Test Case

Input

```
4
```

Output

```
4444
4414
4424
4434
```

Weightage - 5

Input

```
6
```

Output

```
666666
666166
666266
666366
```

Weightage - 5

Input

```
10
```

Output

```
10101010101010101010
10101010110101010
10101010210101010
10101010310101010
```

Weightage - 10

Input

```
15
```

Output

```
151515151515151515151515151515
151515151515151115151515151515
151515151515152151515151515
151515151515153151515151515
```

Weightage - 10

Input

```
13
```

Output

```
131313131313131313131313
131313131313113131313313
131313131313213131313313
131313131313313131313313
```

Weightage - 10

Input

```
17
```

Output

```
17171717171717171717171717171717
17171717171717171117171717171717
17171717171717172171717171717171
17171717171717173171717171717171
```

Weightage - 10

Input

```
16
```

Output

```
16161616161616161616161616161616
16161616161616161116161616161616
16161616161616162161616161616161
```

Weightage - 10

Input

```
18
```

Output

```
181818181818181818181818181818181818
181818181818181818118181818181818181
181818181818181818218181818181818181
181818181818181818318181818181818181
```

Weightage - 10

Input

```
20
```

Output

```
202020202020202020202020202020202020202020
202020202020202020120202020202020202020202
202020202020202020220202020202020202020202
202020202020202020320202020202020202020202
```

Weightage - 10

Input

```
25
```

Output

```
252525252525252525252525252525252525252525252525
252525252525252525252512525252525252525252525252
252525252525252525252522525252525252525252525252
252525252525252525252532525252525252525252525252
```

Weightage - 10

Input

```
50
```

Output

```
505050505050505050505050505050505050505050505050505050505
505050505050505050505050505050505050505050505050505050501
505050505050505050505050505050505050505050505050505050502
```

Weightage - 10

Sample Input

```
3
```

Sample Output

```
333
313
323
```

Solution

```
#include<stdio.h>
int main()
{
int N, row, col,mid, dummy=1;
scanf("%d",&N);
for(col = 0; col < N; col++)
printf("%d", N);
        for(row = 1,printf("\n"); row < N; row++, printf("\n"))
        {
            mid = N /2;
            for(col = 0; col < N; col++)
             if(col==mid)
                printf("%d", dummy++);
             else
             printf("%d", N);


        }
}
```

```
#include<stdio.h>
int main()
{
int N, row, col,mid, dummy=1;
scanf("%d",&N);
for(col = 0; col < N; col++)
printf("%d", N);
        for(row = 1,printf("\n"); row < N; row++, printf("\n"))
        {
            mid = N /2;
            for(col = 0; col < N; col++)
             if(col==mid)
                printf("%d", dummy++);
             else
             printf("%d", N);
        }
}
```

Q2

Test Case

Input	Output
sample lesamp	1

Weightage - 5

Input	Output
qpcrkjnrtmkwqdmzrdxt dxtqpcrkjnrtmkwqdmzr	1

Weightage - 5

Input	Output
ciqhugfuqfxerzxctbng gfuqfxerzxciqhuctbng	-1

Weightage - 10

Input	Output
jqbtymyekhcqrywdnwan ekhcqrywdnwan	-1

Weightage - 10

Input	Output
prvqfidxxyinfcraghew prvqfidxxyinfcraghew	1

Weightage - 10

Input **Output**

```
utryayzfckwauuperhhdjfedvgbkgrtfidaaqmhxgvunewvcti
hxgvunewvctiutryayzfckwauuperhhdjfedvgbkgrtfidaaqm
```

```
1
```

Weightage - 10

Input **Output**

```
kwqtyrjvdagnbkbdvzwznuitkdwkcwqxvnmzeaxbhyguqpeapy
kwqtyrjvdagnbkuqpeapybdvzwznuitkdwkcwqxvnmzeaxbhyg
```

```
-1
```

Weightage - 10

Input **Output**

```
bkevzrytkwpaqauvcqnudapyyywpwhpvdbbaeunjkguxkzyqmj
ezhatatwxunzqviutykakmdudjjxvqzwjiyeapyyhwtuevkzfpkw
```

```
-1
```

Weightage - 10

Input **Output**

```
uppdhguuvgrjjijicdfbayvkuepbpadvhyncgakvjwhhrmnybmcg
ecxqmbmzmxwuaznfwpixntyrgmphhnuyeabezkpmyafcxfjwpp
```

```
-1
```

Weightage - 10

Input **Output**

```
urnezdpzwwbmceuwpcpueadzmmxnzizjekxfmbnjfnqegabzkznr
nrhyxnfdtwiydygdzmczhnxuvgymatphevfbeddixtrjfkrqbpur
```

```
1
```

Weightage - 10

Input **Output**

```
kghpwxfghmvkpwdjqpxhwuxbargmcczykfkwfhfvztcjujqfckrv
kghpwxfghmvkpwdjqpxhwuxbargmcczykfkwfhfvztcjujqfckrv
```

```
-1
```

Weightage - 10

Sample Input **Sample Output**

```
sample
mplase
```

```
-1
```

Solution

```c
#include <stdio.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>
int mystrcmp(char* str1, char* str2)
{
    int index,diff;
    for(index=0 ; str1[index]&&str2[index] ; index++)
    {
        if(str1[index]!=str2[index])
            break;
    }
    diff = str1[index]-str2[index];
    if(diff>0)
       return 1;
    else if(diff<0)
        return -1;
  return 0;
}
int mystrlen(char *str)
{
    int index;
    for(index=0 ; str[index] ; index++);
    return index;
}
int main()
{
    char str1[100],str2[100],safe;
    int len1, len2, shift, diff;
    scanf(" %[^\n]s",str1);
    scanf(" %[^\n]s",str2);
   // printf("%s\n",str1);
    //printf("%s",str2);
    len1 = mystrlen(str1);
    len2 = mystrlen(str2);
    diff = mystrcmp(str1, str2);
    if(diff==0)
      printf("%d",1);
    else
    {
        if(len1==len2)
        {
        while(len2)
        {
            safe = str1[len1-1];
            for(shift=len1-1 ; shift!=0 ; shift--)
                str1[shift] = str1[shift-1];
            str1[shift] = safe;
            diff = mystrcmp(str1, str2);
            if(diff==0)
                break;
            len2--;
        }
        if(diff==0)
          printf("%d",1);
        else
          printf("%d",-1);
        }
        else
            printf("%d",-1);
    }
  return 0;
}



#include <stdio.h>
```

```c
#include <stdio.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>
int mystrcmp(char* str1, char* str2)
{
    int index,diff;
    for(index=0 ; str1[index]&&str2[index] ; index++)
    {
        if(str1[index]!=str2[index])
            break;
    }
    diff = str1[index]-str2[index];
    if(diff>0)
       return 1;
    else if(diff<0)
        return -1;
  return 0;
}
int mystrlen(char *str)
{
    int index;
    for(index=0 ; str[index] ; index++);
    return index;
}
int main()
{
    char str1[100],str2[100],safe;
    int len1, len2, shift, diff;
    scanf(" %[^\n]s",str1);
    scanf(" %[^\n]s",str2);
   // printf("%s\n",str1);
    //printf("%s",str2);
    len1 = mystrlen(str1);
    len2 = mystrlen(str2);
    diff = mystrcmp(str1, str2);
    if(diff==0)
      printf("%d",1);
    else
    {
        if(len1==len2)
        {
        while(len2)
        {
            safe = str1[len1-1];
            for(shift=len1-1 ; shift!=0 ; shift--)
                str1[shift] = str1[shift-1];
            str1[shift] = safe;
            diff = mystrcmp(str1, str2);
            if(diff==0)
                break;
            len2--;
        }
        if(diff==0)
          printf("%d",1);
        else
          printf("%d",-1);
        }
        else
            printf("%d",-1);
    }
  return 0;
}
```

Section 2 - Essay Writing

Q1

Sample Essay

No Essay

Keywords

young, old, agree, teach, not,