Question 1:
Display the diagonal pattern for the string of odd length.

Sample Input 1:

Enter the string : racecar

Sample Output 2:

```
      e
    c   c
  a       a
r           r
  a       a
    c   c
      e
```

Sample Input 2 :

Enter the string : football

Sample Output 2:

Not Possible

Question 2 :
Print the following pattern for the given n:

Sample Input 1:

Enter the number = 3

Sample Output 2:

```
1    6    5
     2    4
          3
```

Sample Input 2:

Enter the number = 5

Sample Output 2:

```
1    12   11   10   9
     2    13   15   8
          3    14   7
               4    6
                    5
```

Question 3 :

Print the largest possible for the given string.

Sample Input:

Enter the number of string to be entered = 2

Enter the string1 : abdf

Enter the string2 : hafd

Sample Output:

String1 : fdba

String2 : hfda

Question 4:

Print the following pattern for the given input.

Input:

Enter the number : 5

Output:

```
5 5 5 5 5 5 5 5 5
5 4 4 4 4 4 4 4 5
5 4 3 3 3 3 3 4 5
5 4 3 2 2 2 3 4 5
5 4 3 2 1 2 3 4 5
5 4 3 2 2 2 3 4 5
5 4 3 3 3 3 3 4 5
5 4 4 4 4 4 4 4 5
5 5 5 5 5 5 5 5 5
```

Question 5:
Check whether the given string has characters of equal difference or unequal difference.

Sample Input 1:

Enter the string : abcdefg

Sample Output 1:

Equal difference.

Sample Input 2:

Enter the string : adxz

Sample Output 2:

Unequal difference.

Explanation:

Sample Input 1 :

string = abcdefg

| b - a | = | f - g | = 1

| c - b | = | e - f | = 1

| d - c | = | d - e | = 1

Since the difference between the characters are same throughout i.e 1, therefore the given string is unique.

Sample Input 2 :

string = adxz

| d - a | ! = | x - z |

Since the difference between the characters (d - a) and (x - z) are not equal, therefore the given string is not unique.

Question 6:
Find one of the maximum possible palindrome in the given string.

Input:

Enter the string : madameaga

Output:

aamdmaa

Input:

Enter the string : abcdefghfgbeadc

Output:

abcdefghgfedcba

Question 7:

Print the distinct words in the given string.

Sample Input 1:

Enter the string : This is Zoho and Zoho is good

Sample Output 1:

The distinct words are : This is Zoho and good

Sample Input 2:

Enter the string : we develop software we craft software

Sample Output 2:

The distinct words are : we develop software craft