

1. Write a program to give the following output for the given input

Eg 1: Input: a1b10

Output: abbbbbbbbbb

Eg 2: Input: b3c6d15

Output: bbbccccccddddd

The number varies from 1 to 99.

2. Write a program to sort the elements in odd positions in descending order and elements in ascending order

Eg 1: Input: 13,2 4,15,12,10,5

Output: 13,2,12,10,5,15,4

Eg 2: Input: 1,2,3,4,5,6,7,8,9

Output: 9,2,7,4,5,6,3,8,1

3. Write a program to print the following output for the given input. You can assume the string is of odd length

Eg 1: Input: 12345

Output:

1 5

2 4

3

2 4

1 5

Eg 2: Input: geeksforgeeks

Output:

```
g               s
e               k
e               e
k               e
s               g
f               r
o
f               r
s               g
k               e
e               e
e               k
g               s
```

4. Find if a String2 is substring of String1. If it is, return the index of the first occurrence. else return -1.

Eg 1:Input:

String 1: test123string

String 2: 123

Output: 4

Eg 2: Input:

String 1: testing12

String 2: 1234

Output: -1

5. **Given two sorted arrays**, merge them such that the elements are not repeated

Eg 1: Input:

Array 1: 2,4,5,6,7,9,10,13

Array 2: 2,3,4,5,6,7,8,9,11,15

Output:

Merged array: 2,3,4,5,6,7,8,9,10,11,13,15

6. **Using Recursion reverse the string such as**

Eg 1: Input: one two three

Output: three two one

Eg 2: Input: I love india

Output: india love I