Instructions:
Total : 06 Marks

1. Solve any six program.
2. Input should be from user.
3. All programs comments is mandatory.
4. Each programs 1 Marks.

Section – I (Solve Any Two & Passing For One)

Q1. Write a java program to display following pattern :

```
1
1 * 2
1 * 2 * 3
1 * 2 * 3 * 4
4 * 3 * 2 * 1
3 * 2 * 1
2 * 1
1
```

Q2. Write a java program to display following pattern :

```
A                 A
A B             B A
A B C         C B A
A B C D     D C B A
A B C D E E D C B A
```

Q3. Write a java program to display following series :

```
2  729  4  512  6  343  8  216  10  125  12  64  14  37  16  8  18  1
```

Section – II (Solve Any Two & Passing For One)

Q1. Write a java program to rotate array by specific index. (Without second array)

Q2. Write a java program to calculate sum of digits in character array.

          Input : - giris123tech45hub

          Output : - 1+2+3+4+5 = 15

Q3. Write a java program to find union array & intersection array of two arrays.

    Input :-

    First Array : 1 2 3 4 5

    Second Array : 3 4 5 6 7

    Output :-

    Union Array : 1 2 3 4 5 6 7

    Intersection Array : 3 4 5

Section – III (Solve Any Two & Passing For One)

Q1. Write a java program to display following pattern using function recursion.

                           1

                         1 2

                       1 2 3

                     1 2 3 4

                   1 2 3 4 5

Q2. Write a java program to check whether number is Strong or Not using function.

Q3. Write a java program to check array is majority array or not using function recursion.