

JA111 Day 8 Assignment

Q1) Write the logic to reverse the String given in the parameter without the help of predefined reverse method and return the reversed String:(HINT use Array)

```
class Main{
    public static String reversString(String input){
        //write the logic
    }
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter a String to reverse");
        String originalString = sc.next();
        String result = reversString(originalString);
        System.out.println("Original String is :"+ originalString);
        System.out.println("Reversed String is :"+ result);
    }
}
```

Q2) Even Sum in Columns

Description

- You have to create a 2D array, whose dimensions are N, M, and take the input from the user.
- The value stored in N denotes the number of rows, and the value in M denotes the number of columns
- If the array looks like arr = [1,2,3],[4,5,6],[7,8,9]
- For all columns, you have to print the sum of even elements present in the column
4 (Even numbers in the column are, [4]. Therefore, the sum becomes 4)
10 (Even numbers in the row are, [2,8]. Therefore, the sum becomes 10)
6 (Even numbers in the row are, [6]. Therefore, the sum becomes 6)

Sample Input 1

Enter no of rows: 3

Enter no of columns: 3

1 2 3

4 5 6

7 8 9

Sample Output 1

4

10

6

Hint

In the sample test case, the value stored in N = 3,M = 3, and the array is [1,2,3],[4,5,6],[7,8,9], then the required output will be

4 (Even numbers in the column are, [4]. Therefore, the sum becomes 4)

10 (Even numbers in the row are, [2,8]. Therefore, the sum becomes 10)

6 (Even numbers in the row are, [6]. Therefore, the sum becomes 6)

Q3) Finding prime number inside an array:

```
public class Main{
    public int[] findAndReturnPrimeNumbers(int[] inputArray){
        //write the logic to iterate through the supplied inputArray and return array of prime
        numbers
        //if no prime number is found then return the empty array.
    }
}
```

```

public static void main(String[] args){
    //Create the object of Main class
    //on the object of Main class call the findAndReturnPrimeNumbers method
    //by supplying the following array as the parameter
    int[] arr = {10,12,5,50,11,14,15};
    //print each element from the returned array of findAndReturnPrimeNumbers method
    //if findAndReturnPrimeNumbers method returns an empty array then print the following
    message:
    // "Prime number not found in the supplied Array"
}
}

```

Q4)Take the Command Line Argument and print the factorial of that number.

Case1-

If only one number is supplied then simply find the factorial of that number

Input-

5

Output-

120

Case2-

If two numbers are supplied then find the absolute difference of the two numbers and then find the factorial of the resulting number.

Input-

5 8

Output-

6

Case 3-

If three or more numbers are supplied-

Input-

5 6 8 9

Output-

Error

Q5) Create a Student Bean class with the following fields-

```

roll: Integer
name: String
address: String
marks: Integer

```

Create a **Demo class** and perform the following operation in the main method:

Take the number as input from the user, How many Student objects need to be created.

Create an array of Students with those numbers.

Initialize all the student objects by taking details from the user.

print all the Student details.

print the average of all the Student marks.