Day 6 Assignment JA111

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)

```
import java.util.Scanner;

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 orignalString = 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 = 3,M = 3,
- The value stored in N denotes the number of rows, and the value in M denotes the number of columns
- The 2D array is stored in a variable with the name arr
- 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)

Output

- For each column, print the sum of even numbers present in the column, line by line

Sample Input 1

1 2 3
4 5 6
7 8 9

Sample Output 1

4
10
6

Hint

In the sample test case, the value stored inN = 3,M = 3, and the array is arr = [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
          //determine each element whether it is prime or not
          //create a second array of int
          //if any number is prime inside the inputArray then add that number inside the second
          //array
          //and return the second array
          //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
Ex- 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 7
Output-
2! (absolute difference of 5 & 7 is 2)

Case 3-
If three or more numbers are supplied-

Input-
5 6 8 9
Output-
Error