

COMP1020 Winter 2024

In-Class Participation Week 2 Tuesday

Q1) The program should accept a string from the user. Store it in a variable **str**. Now, write a function to **print a string in reverse**. (Ignore the upper and lower case and don't use the `StringBuilder` class). [1]

Example:

Input : "Mom"

Output: "mom".

Input: "Moon"

Output: "noom"

Q2) Write a program to **print all the indexes of 'a'** in the string :
"Graceful panda danced salsa, playing a jazzy trumpet, as a vibrant parrot sang along, creating a joyful atmosphere". [1]

Q3) Accept **10 numbers from the user** into an array names **arrNum**. Write a program to find out how many of them are **positive**, how many are **negative**, how many are **even**, and how many are **odd**. [1]

Q4) Predict the output

[1]

```
public class Week2Q4 {  
    public static void main(String[] args) {  
  
        int arr[] = { 10, 11, 12, 13, 14 };  
        add(arr);  
        for (int i = 0; i < arr.length; i++) {  
            System.out.print(arr[i] + "\t");  
        }  
  
        public static void add(int[] arr) {  
            for (int i = 0; i < arr.length; i++)  
                arr[i] += i;  
        }  
    }  
}
```

Q5) Randomly generate 2 points (i.e., (x_1, y_1) and (x_2, y_2)). Find the distance between these points. (Use Math class to complete the calculations).

[1]

$$\text{distance between two points} = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$