

COMP1020 Winter 2024

In-Class Participation Week 3 Tuesday

Q1) What is the output?

[1M]

```
public class Q1 {  
    int a;  
    int b;  
    public Q1(int a, int b) {  
        b = a;  
        this.b = b;  
    }  
    void display() {  
        System.out.println("a=" + a + " b=" + b);  
    }  
}
```

```
public class Q1ThisEx {  
    public static void main(String[] args) {  
        Q1 ob = new Q1(20, 30);  
        ob.display();  
    }  
}
```

Q2) Consider the Library Application question from **Week 2 - Thursday**. **[1M]**

LibraryBook.java file should use a static variable '**count**' to keep track of the total number of books created. Also, create a static function **bookCount()** to return the count of the total number of book objects created.

In the **LibraryTest.java** file, create 3 additional book objects to test the static variable and method and then display the total number of book objects created by calling the static function.

Q3) Accept **three** String objects (with the help of the String class) str1, str2 and str3 from the user. Compare the objects with the compareTo method and display the strings in ascending order. **[1M]**

Example:

Input: Enter str1: apple

Enter str2: banana

Enter str3: cherry

Output: apple, banana, cherry.

Q4) Find the output.

[1M]

```
public class Q4 {  
    public static void main(String[] args) {  
        int val = 3;  
        func(val);  
        System.out.println("Value from main(): " + val);  
    }  
  
    public static int func(int a) {  
        a += 6;  
        System.out.println("Value from func(): " + a);  
        return a;  
    }  
}
```

Q5) What is the output

[1M]

```
public class Q5 {  
    int a = 10, b = 20;  
    Q5() {  
        System.out.println("Default constructor called");  
    }  
    Q5(int a, int b) {  
        System.out.println("Parameterized constructor called");  
        this.a = a;  
        this.b = b;  
    }  
  
    public static void main(String[] args) {  
        Q5 obj = new Q5(1, 2);  
        System.out.println("a= " + obj.a + " b= " + obj.b);  
        Q5 objD = new Q5();  
        System.out.println("a= " + objD.a + " b= " + objD.b);  
    }  
}
```