

**Question - 1**  
Question 1

SCORE: 10 points

What is the output of this program?

```
public class Demo {  
    public static void main (String []args){  
        for(int i=0; i<10; i++){  
            if(i==4){  
                System.out.print(i+ " ");  
                break;  
            }  
            if(i ==2 || i ==4|| i ==6) {  
                System.out.print(i + " ");  
                continue;  
            }  
        }  
    }  
}
```

- ☒ 2 4
- ☐ 2 4 6
- ☐ 2
- ☐ 4

**Question - 2**  
Question 2

SCORE: 10 points

What is the output of this program?{(

```
public class NumberGame {  
    public static void main(String []args) {  
        ArrayList<Integer> result = new  
ArrayList<>();  
        int[] nums = {2, 8, 3, 6, 1, 10, 5, 7,  
4,3};  
        int[] copy = nums;  
        for (int i = 0; i < nums.size(); i++) {  
            if (nums[i] % 2 == 1) {  
                result.add(copy[i]);  
                nums[i]++;  
                break;  
            }  
        }  
        for (int i: result) {  
            System.out.print(i + " " );  
        }  
    }  
}
```

```
}  
}
```

- ☐ 3
- ☐ 3 1 5 7 3
- ☐ 4
- ☒ Compiler Error

### Question - 3

#### Question 3

SCORE: 10 points

\_\_\_\_\_ is the Parent class of all classes in the java system.

- ☐ String
- ☐ Java.lang
- ☒ Object
- ☐ Parent

### Question - 4

#### Question 4

SCORE: 10 points

```
public class Q4 {  
    private static boolean  
passwordPatternCorrect() {  
        Pattern p =  
Pattern.compile("_____");  
        Matcher m = p.matcher("Do you like this  
quiz?");  
        boolean b = m.matches();  
        System.out.print(b);  
        return b;  
    }  
    public static void main(String args[]){  
        passwordPatternCorrect();  
    }  
}
```

Choose the code(s) fill in the gap that makes the b to be TRUE.(Please find all correct answers)

- ☐ [a-zA-Z0-9?]+.\$
- ☒ (\\w?)+?.\*\$
- ☐ [\\w?]+
- ☐ [\\d?]+

## Question - 5

### Question 5

SCORE: 10 points

What is the output for the below code?

Which answer(s) match the given pattern?

Pattern: **a\*b+c?**

- ☒ ab
- ☒ abc
- ☐ bbcc
- ☐ ac
- ☒ bbbc

## Question - 6

### Coding : Rotate Array

SCORE: 50 points

Given an array, rotate the array to the right by  $k$  steps, where  $k$  is non-negative.

#### Example 1:

```
Input: [1,2,3,4,5,6,7] and k = 3
Output: [5,6,7,1,2,3,4]
Explanation:
rotate 1 steps to the right: [7,1,2,3,4,5,6]
rotate 2 steps to the right: [6,7,1,2,3,4,5]
rotate 3 steps to the right: [5,6,7,1,2,3,4]
```

#### Example 2:

```
Input: [-1,-100,3,99] and k = 2
Output: [3,99,-1,-100]
Explanation:
rotate 1 steps to the right: [99,-1,-100,3]
rotate 2 steps to the right: [3,99,-1,-100]
```

If you're going to use custom case by yourself, please input array like:

1 2 3 4 5 6 7 8

3

(Split by " ")

second line input your parameter "k"