

TASK THREE: PART TWO

With relevant examples, explain the following concepts as used in java programming.

a) mutable classes

Are objects whose value can be changed after initialization. One can change the objects values, such as field and states, after the object is created e.g. java. util. Date, string buffer etc.

```
Public class JtpExample {  
    Private String s;  
  
    JtpExample (String s) {  
  
        this. s = s;  
  
    }  
  
    Public string setName () {  
  
        Return s;  
  
    }  
  
    Public void setName (string coursename) {  
  
        this. s = coursename;  
  
    }  
  
    Public static void main (strings [] args) {
```

```

JtpExample obj = new JtpExample ("Java Tpoint")
System.out.println (obj. getName ());
//Here, we can update the name using the setName

Obj.setName ("java training");

System.out.println (obj. getName ());

}

}

```

output

- ✓ JavaTpoint
- ✓ Java training

b) immutable classes

Are objects whose value cannot change after initialization. One cannot change anything once the objects is created example primitive object's such as int, long, float, double, string class etc.

```

Public class JtpExample1 {
    Private final String s;

    JtpExample1(final String s) {
        this. s = s;
    }

    Public final string getName () {
        Return s;
    }
}

```

```

}

Public static void main (string [] args) {

JtpExamples obj = new JtpExamples ("core java training");

System.out.println(obj. getName ());

}

}

```

Output

✓ core java training

2.Explain what's a string buffer class as used in java, the syntax for creating an object and methods in string Buffer class

- A string buffer class is used to create mutable (modifiable)string. The string buffer class in java is same s string class except it is mutable i.e. it can be changed

Syntax for creating an object of an object

- By string literal syntax- char str_name[size]
- By new keyword syntax- NewExample obj=new NewExample();

Methods in string buffer class

- StringBuffer class append () Method
- StringBuffer insert () Method
- StringBuffer replace () Method

- StringBuffer delete () Method

2(b). output of the given program is;

ANSWER -1 14 8 15

c)explain your answer in (2b)

This is because `indexOf('c')` and `lastIndexOf('c')` are pre-defined Function which are used to get the index of first and last occurrence of the character pointed by c in the given array output.

d) With explanation, write the output of the program

Answer- Jambo Kenya

Append () method of class StringBuffer is used to concentrate the string representation to the end of invoking string.

e) with explanations, write the output of the following program

ANSWER- obmaj

This is because `reverse ()` method reverses all characters. It returns the reversed object on which it was called.

f) with explanations, write the output of the program

ANSWER- 1 is a digit

- a is a lower case letter

EXPLANATION- Character.isDigit(c []), Character.isUpperCase(c []), Character.isWhitespace(c[i]) are the function of library java. Lang they are used to find whether the given character is of specified type or not. Thy return true or false i.e. Boolean variable

