

Q3. i.

```
public class Test{
    public static void main(String args[]){
        int num_01 = 2;
        int num_02 = 1;

        if((num_01 >= num_02) && (num_01 < 3)){
            num_01+=5;
        }
        System.out.println("Value of num_01 is " + num_01);
    }
}
```

ii.

```
public class Test{
    public static void main(String args[]){
        int mark = 5;
        String grade = "";
        switch(mark){
            case 10:
                grade = "Distinction";
                break;
            case 9:
                grade = "Distinction";
                break;
            case 8:
                grade = "Distinction";
                break;
            case 7:
                grade = "Very Good Pass";
                break;
            case 6:
                grade = "Very Good Pass";
                break;
            case 5:
                grade = "Credit Pass";
                break;
            case 4:
                grade = "Credit Pass";
                break;
            case 3:
                grade = "Ordinary Pass";
                break;
            case 2:
```

```

        grade = "Ordinary Pass";
        break;
    default:
        grade = "Failure";
    }
    System.out.println("Grade is " + grade);
}
}

```

iii.

```

public static int triangularNumber(int n) {
    int triNum = 0;
    int i = 1;

    while(i<=n){
        triNum = triNum + i;
        i++;
    }
    return triNum;
}

```

iv.

- a. 4 asterisks(*) will be printed.
- b. 6 asterisks(*) will be printed.
- c. 5 asterisks(*) will be printed.
- d. 4 asterisks(*) will be printed.
- e. 8 asterisks(*) will be printed.