1. Show the output of the GradeReport program generated in the switch statement below (no need to show other output, eg the prompts) if the user enters each of the following inputs. Does the output change if the break statement indicated below is removed? (redo the question with the break statement removed – you can just write “same” if it does not change anything).

With **break** in place:  

With **break** removed:

a) 82
b) 46
c) 123

//************************************************************
//  GradeReport.java       Author: Lewis/Loftus
//********************************************************************
import java.util.Scanner;
public class GradeReport
{
    public static void main (String[] args)
    {
        int grade, category;
        Scanner scan = new Scanner (System.in);
        System.out.print ("Enter a numeric grade (0 to 100): ");
        grade = scan.nextInt();
        category = grade / 10;
        System.out.print ("That grade is ");
        switch (category)
        {
            case 10:
                System.out.println ("perfect!");
                break;
            case 9:
                System.out.println ("excellent.");
                break;
            case 8:
                System.out.println ("good.");
                break;
            case 7:
                System.out.println ("average.");
                break;
            case 6:
                System.out.println ("below average. See your instructor");
                break;
            default:
                System.out.println ("not passing.");
        }
    }
}
2. What gets printed?

```java
int n = 7;
System.out.print("That is "+((n == 10)?"good":"lucky").
```

3. Express the following logic in a succinct manner using the conditional operator.

```java
if (val <= 20)
    System.out.println("small number");
else
    System.out.println("big number");
```
1. Show the output of the GradeReport program generated in the switch statement below (no need to show other output, eg the prompts) if the user enters each of the following inputs. Does the output change if the break statement indicated below is removed? (redo the question with the break statement removed – you can just write “same” if it does not change anything).

With break in place: 

With break removed:

a) 105

b) 86

c) 33

//*************************************************************/
//  GradeReport.java  Author: Lewis/Loftus
//*********************************************************************/
import java.util.Scanner;
public class GradeReport
{
    public static void main (String[] args)
    {
        int grade, category;
        Scanner scan = new Scanner (System.in);
        System.out.print ("Enter a numeric grade (0 to 100): ");
        grade = scan.nextInt();
        category = grade / 10;
        System.out.print ("That grade is ");
        switch (category)
        {
            case 10:
                System.out.println ("perfect!");
                break;
            case 9:
                System.out.println ("excellent.");
                break;
            case 8:
                System.out.println ("good.");
                break;
            case 7:
                System.out.println ("average.");
                break;
            case 6:
                System.out.println ("below average. See your instructor");
                break;
            default:
                System.out.println ("not passing.");
        }
    }
}
2. What gets printed?

```java
int n = 10;
System.out.print("That is " + ((n == 10)? "good": "lucky");
```

3. Use the conditional operator to write a declaration that initializes a char variable named `id` to 'X' if the boolean variable `status` is true and to 'Y' otherwise.