

1. Write a java program to implement the following pseudocode:

```
FOR each person from 1 to 4
    GET exam mark
        IF exam mark is > 40 AND <= 100
            ADD one to number of passes
        ELSE IF exam mark is > 0 AND < 40
            ADD one to number of fails
        ELSE
            Display invalid mark
    DISPLAY number of passes
    DISPLAY number of fails
```

2. Write a java program that uses a for loop to display the following pattern on screen:

```
*****
```

3. Modify this program so that it uses a nested for loop to display the following pattern on screen.

```
*****
*****
*****
```

4. The following code works out the total sales for the four quarters of the year. Rewrite the program using a following `for` loop instead of the `do while` loop.

```
// declare variables
Scanner keyboardIn = new Scanner(System.in);
int quarter = 1;
double quarterlySales = 0;
double totalSales = 0;

do
{
    System.out.print("Enter quarterly sales for quarter " + quarter);
    quarterlySales = keyboardIn.nextDouble();
    totalSales = totalSales + quarterlySales;
    quarter++;
}while(quarter <= 4);

System.out.println("Total sales for the year: " + totalSales);
```

5. Write a java program that allows the user to repeatedly order from a Pizza menu until they choose to exit. The menu should offer three types of pizza - Margherita, Hawaiian and Vegetarian. The program should count the number of each type of pizza in the order.
6. Modify this program so that a Margherita pizza costs €10, a Hawaiian pizza costs €12 and an Vegetarian pizza costs €9.50. The program should calculate and display the total cost of the order.