```java
package gradecalculator;
import java.util.*;
public class GradeCalculator
{
    public static void main(String args[])
    {
        float total=0,percentage,grade;
        int pass=1;
        Scanner sc=new Scanner(System.in);

        int[] marks=new int[5];
        for(int i=0;i<5;i++)//considering 5 subjects
        {
            System.out.println("Enter marks of Subject "+(i+1));
            marks[i]=sc.nextInt();
            if(marks[i]>100||marks[i]<0)
            {
                System.out.println("invalid input...Enter value between 0 and 100");
                System.exit(0);
            }
            else if(marks[i]>0&&marks[i]<45)
            {
                pass=0;
            }

            total=total+marks[i];
        }

        percentage=total/5;
        //gradw calculation

        if(percentage>=90)
        {
            grade=10;
        }
        else if(percentage>75&&percentage<90)
        {
            grade=9;
        }
        else if(percentage>=80&&percentage<90)
        {
            grade=8;
        }
        else if(percentage>=70&&percentage<80)
        {
            grade=7;
        }
        else if(percentage>=60&&percentage<70)
        {
            grade=6;
        }
        else if(percentage>=45&&percentage<60)
        {
            grade=5;
        }
        else
        {
            grade=0;
        }

         //pass or fail
        //if fail in any subject also considered as fail
        if (grade==0||pass==0)
        {
            System.out.println("Result: Fail");
        }
```

```java
67          else
68          {
69              System.out.println("Result: Pass!!");
70              System.out.println("Total Marks Obtained= "+total);
71              System.out.println("Grade: "+grade);
72              System.out.println("Percentage Obtained= "+percentage+" %");
73          }
74      }
75
```