# Assessment Task 1 - In-Class Group Workshop Week 3

**Submitted by**

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1. Write pseudocode and develop a program that allows the user to input a set of 5 marks. The program calculates the total and display the grade according to the following information:

|  |  |
| --- | --- |
| Total | Grade |
| 85-100 | High Distinction |
| 75-84 | Distinction |
| 65-74 | Credit |
| 64-50 | Pass |
| 0-49 | Fail |

**The pseudocode will be:**

 **Start**

 Declare an array marks[5] to store 5 marks.

 Declare a variable total as an integer.

 Declare a variable grade as a string.

 Initialize total to 0.

 For each index i from 0 to 4:

* Prompt the user to input a mark.
* Store the input in marks[i].
* Add marks[i] to total.

 If total is between 85 and 100 (inclusive):

* Set grade to "High Distinction".

 Else if total is between 75 and 84 (inclusive):

* Set grade to "Distinction".

 Else if total is between 65 and 74 (inclusive):

* Set grade to "Credit".

 Else if total is between 50 and 64 (inclusive):

* Set grade to "Pass".

 Else if total is between 0 and 49 (inclusive):

* Set grade to "Fail".

 Else:

* Set grade to "Invalid total".

 Display "Total Marks: " + total.

 Display "Grade: " + grade.

 **End**

The java code for the following problem :

*//Sabbir Hasan Rabbi*

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import **java.util.Scanner**;

**public** **class** GradeCalculator {

**public** **static** **void** main(**String**[] args) {

**Scanner** scanner = new Scanner(System.in);

**int**[] marks = new **int**[5];

**int** total = 0;

**String** grade = "";

        for (**int** i = 0; i < 5; i++) {

            System.out.print("Enter mark " + (i + 1) + ": ");

            marks[i] = scanner.nextInt();

            total += marks[i];

        }

        if (total >= 85 && total <= 100) {

            grade = "High Distinction";

        } else if (total >= 75 && total <= 84) {

            grade = "Distinction";

        } else if (total >= 65 && total <= 74) {

            grade = "Credit";

        } else if (total >= 50 && total <= 64) {

            grade = "Pass";

        } else if (total >= 0 && total <= 49) {

            grade = "Fail";

        } else {

            grade = "Invalid total";

        }

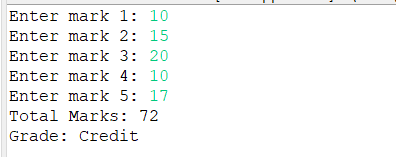
        System.out.println("Total Marks: " + total);

        System.out.println("Grade: " + grade);

    }

}

Output for 5 random inputs



1. Write a program to enter month number. Use switch case structure to print out the name of the month. Also display error message for wrong month number.

The java code for this problem

*//Id: k240175*

*//Sabbir Hasan Rabbi*

import **java.util.Scanner**;

**public** **class** MonthName {

**public** **static** **void** main(**String**[] args) {

**Scanner** scanner = new Scanner(System.in);

        System.out.print("Enter a month number (1-12): ");

**int** monthNumber = scanner.nextInt();

        switch (monthNumber) {

            case 1:

                System.out.println("January");

                break;

            case 2:

                System.out.println("February");

                break;

            case 3:

                System.out.println("March");

                break;

            case 4:

                System.out.println("April");

                break;

            case 5:

                System.out.println("May");

                break;

            case 6:

                System.out.println("June");

                break;

            case 7:

                System.out.println("July");

                break;

            case 8:

                System.out.println("August");

                break;

            case 9:

                System.out.println("September");

                break;

            case 10:

                System.out.println("October");

                break;

            case 11:

                System.out.println("November");

                break;

            case 12:

                System.out.println("December");

                break;

            default:

                System.out.println("Error: Invalid month number. Please enter a number between 1 and 12.");

                break;

        }

        scanner.close();

    }

}

The output for a valid and nonvalid input:

