

Experiment No. 6

Input Specification: m1, m2 and m3 as Integer to store mark in 3 subjects

Output Specification: Appropriate message indicating grade obtained by the student

Declaration:

m1, m2, m3 = to store marks of 3 subjects as int

total = to store sum of marks obtained as int

percentage = to store %age marks obtained as float

grade = to store numeric grade as int

Algorithm:

Step1: Start

Step 2: Declare m1, m2, m3, total, grade as int and percentage as float

Step 3: Print message to input m1, m2 and m3 and store them in respective variables

Step 3: Check if each of m1, m2 and m3 are between 0 to 100 if so goto step 4 otherwise goto step 10

Step 4: if m1, m2 and m3 all are greater than 40 then goto Step 5 otherwise goto Step 10.

Step 5: Calculate total marks and store in total

Step 6: Calculate %age obtained by dividing total by 3.0 and store it in percentage

Step 7: Calculate numeric grade by flooring percentage and dividing by 10 and store in grade.

Step 8: switch value of grade

Step 8 i. If grade is 10 do nothing goto step 8 ii.

Step 8 ii. If grade is 9 do nothing goto step 8 iii.

Step 8 iii. If grade is 8 do nothing goto step 8 iv.

Step 8 iv. If grade is 7 print grade obtained is Distinction goto step 10.

Step 8 v. If grade is 6 print grade obtained is First Class goto step 10.

Step 8 vi. If grade is 5 print grade obtained is pass Class goto step 10.

Step 9: Print Student has failed goto to step 11.

Step 10: Print Entered Marks are invalid goto step 3.

Step 11: Stop

Flowchart:

