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#-----------------------------------------------
# Function Calculate grade

if mark is greater or equal 80
    Grade is High Distinction
else if mark is greater or equal 70
    Grade is Distinction
else if mark is greater or equal 60
    Grade is Credit
else if mark is greater or equal 50
    Grade is Pass
else
    Grade is Fail
return the value of grade
#-----------------------------------------------
# Main Code

Prompt user for number of assessments
While number of assessments are less than 1
    If number of assessments are less than 1
        Display Error

For each assessment
    Prompt user for assessment name
    Append the assessment name to the list
    While input of the user is less than 1
        Prompt user for assessment value
        If input of user is less than 1
            Display error
    Append the assessments value to the list

If sum of assessment values is not 100
    Show error message
Else
    While number of students is less than 1
        Prompt user for number of students
        If input of user is less than 1
            Display error
    For each student
        Prompt user for student name
        For each assessment
            Prompt user for assessment mark
            If assessment mark is greater than assessment value
                Set mark to value of assessment
            Else if assessment mark is less than 0
                Set mark to 0
            Convert mark properly using assessment value
            Append mark to list of total marks student
            Calculate and display assessment grade
        Calculate total mark of student
```

Call function to calculate and display grade of student
            Append mark to list of total marks class
            if total mark of student is greater than total class mark
                set top student name
                set student top class mark
            clear list of total mark student to use in the next iteration

        Display message all Marks entered
        Calculate class average mark
        Call function to calculate grade of the class
        Display class average and top student details

Prompt user to press any key to end the program
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