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# Function Calculate grade

if mark is greater or equal 80 and less or equal 100
    Grade is High Distinction
else if mark is greater or equal 70 and less or equal 79
    Grade is Distinction
else if mark is greater or equal 60 and less or equal 69
    Grade is Credit
else if mark is greater or equal 50 and less or equal 59
    Grade is Pass
elif if mark is greater or equal 0 and less or equal 49
    Grade is Fail
return the value of grade
#-----

# Main Code

Prompt user for number of assessments
While number of assessments are less than 1
    try next statament to handling errors
        If number of assessments are less than 1
            Display Error
        handling exception Invalid input

For each assessment
    try next statament to handling errors
        Prompt user for assessment name
    handling exception Invalid input
    Append the assessment name to the list
    While input of the user is less than 1
        try next statament to handling errors

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        Prompt user for assessment value
    handling exception Invalid input
    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
        try next statament to handling errors
            Prompt user for number of students
            If input of user is less than 1
                Display error
            handling exception Invalid input
    For each student
        try next statament to handling errors
            Prompt user for student name
            handling exception Invalid input
        For each assessment
            try next statament to handling errors
                Prompt user for assessment mark
            handling exception Invalid input
            If assessment mark is greater than assessment value
                Set mark to value of assessment
            Else if asesment mark is less than 0
                Set mark to 0
            Convert mark appropertely 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

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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
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Display message all Marks entered
Calculate class average mark
Call function to calculate grade of the class
Display class average and top student details
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Prompt user to press any key to end the program
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