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# Fall 2018
# Lab 3

# From Program 2
def calcGrade(score): # Calculate letter grade given score
    if (score >= 90):
        grade = "A"
    elif (score >= 80):
        grade = "B"
    elif (score >= 70):
        grade = "C"
    elif (score >= 60):
        grade = "D"
    else:
        grade = "F"

    return grade

def gradeReport(gradeDict): # Display Grade Report
    # Pull keys from dictionary and sort
    # As in Listing 4.8
    nameList = list(gradeDict.keys())
    nameList.sort()

    # Formatting using Chapter 3 string methods
    # There is an easier way but this all we've seen, so...
    columnSize = 10
    print("GRADE REPORT".center(2*columnSize + 1))
    print("NAME".center(columnSize), "GRADE".center(columnSize))
    print("---------- ----------")

    # Print each key and value
    # As in Listing 4.8
    for name in nameList:
        print(name.ljust(columnSize), gradeDict[name].center(columnSize))

# Input modified from Program 2
numScores = int(input("How many test scores to grade? "))

gradeDict = {} # Start with empty dictionary

for i in range(numScores):
    studentName = input("Name " + str(i+1) + " : ")
    score = float(input("Score " + str(i+1) + ": "))
    grade = calcGrade(score)
    gradeDict[studentName] = grade # Add to dictionary

print()
gradeReport(gradeDict)
```

Results

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How many test scores to grade? 3

Name 1 : joe

Score 1: 91

Name 2 : Dan

Score 2: 76

Name 3 : Mike

Score 3: 87

     GRADE REPORT
   NAME      GRADE
---------- ----------
Dan             C
Mike            B
joe             A
```