```python
 2 # MSBA 605
 3 # Fall 2018
 4 # Lab 3
 5 # Due: 9/9/2018
 6 #Lab 3 uses Python to create a dictonary used to store student names
 7 #and associated grades.
 8 #It extends on the work that was begun in Program 2. It gathers the input
 9 #for each student and asks the user to enter the student's name and score
10 #it uses a dictionary that stores student grades. the key in the student
11 #grades dictionary is the student's name and the value is the student's
12 #grade (both are strings).
13 #it will allow the user to traverse the keys in the dictionary of student grades
14 #(in alphabetical order) and print a grade report giving each student's name,
15 #followed by thier grade (on separate lines).
16
17 def calcGrade(score): # Calculate letter grade given score
18     if (score >= 90): #determines the score for a "A"
19         grade = "A"
20     elif (score >= 80): #determines the score for a "B"
21         grade = "B"
22     elif (score >= 70): #determines the score for a "C"
23         grade = "C"
24     elif (score >= 60): #determines the score for a "D"
25         grade = "D"
26     else:
27         grade = "F"  #determines the score for a "F"
28
29     return grade
30
31 def SortedDictionary(Dictionary): #print dictionary
32     ietm =  Dictionary.keys()
33     for k in sorted(ietm):
34         print(k, "   ", Dictionary[k])
35
36
37

38 # Test grade function
39 numScores = int(input("How many test scores to grade? "))
40
41 Student2Score = {}
42
43 for i in range(numScores):
44     name = input("Name " + str(i+1) + ": ")
45     score = float(input("Score " + str(i+1) + ": "))
46     grade = calcGrade(score)
47     Student2Score.update({name: grade})
48     print("Grade " + str(i+1) + ":", grade)
49
50 SortedDictionary(Student2Score)
51
```

Results

```
How many test scores to grade? 3

Name 1: John

Score 1: 91
Grade 1: A

Name 2: Dan

Score 2: 83
Grade 2: B

Name 3: Jim

Score 3: 76
Grade 3: C
Dan     B
Jim     C
John    A
```