

Component C. Personalized Project Reference.**Procedure:**

i.

```
68 def findavg(category):  
69     num = 0  
70     lettergrade = 'X'  
71     for i in range(len(category)):  
72         num = num + float(category[i])  
73     avg = math.floor(num / len(category))  
74  
75  
76     if avg > 89:  
77         lettergrade = 'A'  
78     if avg < 90 and avg > 79:  
79         lettergrade = 'B'  
80     if avg < 80 and avg > 69:  
81         lettergrade = 'C'  
82     if avg < 70 and avg > 65:  
83         lettergrade = 'D'  
84     if avg < 65:  
85         lettergrade = 'F'  
86  
87     return avg, lettergrade  
88
```

ii.

```
102 cat1avg, lettergrade1 = (findavg(category1))  
103 cat2avg, lettergrade2 = (findavg(category2))  
104 cat3avg, lettergrade3 = (findavg(category3))  
105
```

List:

i.

```
39 while (grade != 'Q' and grade != 'q'):  
40     grade = (input("Grade " + str(i) + ": "))  
41     if (grade != 'Q' and grade != 'q'):  
42         category1.append(grade)  
43     i = i + 1
```

ii.

```
71     for i in range(len(category)):  
72         num = num + float(category[i])  
73     avg = math.floor(num / len(category))
```

