Exercise 1: Convert the previous marks-to-grade example (example-5) to read the grade letter and display the associated mark range.

Solution-1:

```
letter=input("Enter the letter grade: ")
if(letter== "A"):
 print("Your range is 90 to 100")
elif(letter == "A–"):
 print("Your range is 87 to 89")
elif(letter == "B+"):
 print("Your range is 84 to 86")
elif(letter == "B"):
 print("Your range is 80 to 83")
elif(letter == "B–"):
 print("Your range is 77 to 79")
elif(letter == "C+"):
 print("Your range is 74 to 76")
elif(letter == "C"):
 print("Your range is 70 to 73")
elif(letter == "C–"):
 print("Your range is 67 to 69")
elif(letter == "D+"):
 print("Your range is 64 to 66")
elif(letter == "D"):
 print("Your range is 60 to 63")
else: print("Your range is 0 to 59")
```

Solution-2:

```
mark = input("What is your mark?  ")
mark = int (mark)

if (mark >= 90):
  Grade = "A"
elif (mark >= 87 and mark <= 89):
  Grade = "A–"
elif (mark >= 84 and mark <= 86):
  Grade = "B+"
elif (mark >= 80 and mark <= 83):
  Grade = "B"
```

```
elif (mark >= 77 and mark <= 79):
  Grade = "B-"
elif (mark >= 74 and mark <= 76):
  Grade = "C+"
elif (mark >= 70 and mark <= 73):
  Grade = "C"
elif (mark >= 67 and mark <= 69):
  Grade = "C-"
elif (mark >= 64 and mark <= 66):
  Grade = "D+"
elif (mark >= 60 and mark <= 63):
  Grade = "D"
else:
  Grade = "F"
print ("Your grade is : " + Grade)
```

Exercise 2: Modify the above example to display the Grade Point Average (GPA) based on the mark.

```
mark = input("What is your mark?  ")
mark = int (mark)

if (mark >= 90 and mark <= 100):
  GPA = "4"
elif (mark >= 87 and mark <= 89):
  GPA = "3.7"
elif (mark >= 84 and mark <= 86):
  GPA = "3.3"
elif (mark >= 80 and mark <= 83):
  GPA = "3"
elif (mark >= 77 and mark <= 79):
  GPA = "2.7"
elif (mark >= 74 and mark <= 76):
  GPA = "2.3"
elif (mark >= 70 and mark <= 73):
  GPA = "2"
elif (mark >= 67 and mark <= 69):
  GPA = "1.7"
elif (mark >= 64 and mark <= 66):
```

```
  GPA = "1.3"
elif (mark >= 60 and mark <= 63):
  GPA = "1"
else:
  GPA = "0"
print ("Your grade point is : " + GPA)
```

Exercise 3: Modify the above program to allow the student to enter the marks for 5 courses and calculate the semester average and GPA.

```
Mark_1 = input("What is your first mark?  ")
Mark_1 = int (Mark_1)

Mark_2 = input("What is your second mark?  ")
Mark_2 = int (Mark_2)

Mark_3 = input("What is your third mark?  ")
Mark_3 = int (Mark_3)

Mark_4 = input("What is your fourth mark?  ")
Mark_4 = int (Mark_4)

Mark_5 = input("What is your fifth mark?  ")
Mark_5 = int (Mark_5)

Average_mark = (Mark_1 + Mark_2 + Mark_3 + Mark_4 + Mark_5)/5
print("Your Average mark is: ", Average_mark)

if (Average_mark >= 90 and Average_mark <= 100):
  GPA = "4"
elif (Average_mark >= 87 and Average_mark <= 89):
  GPA = "3.7"
elif (Average_mark >= 84 and Average_mark <= 86):
  GPA = "3.3"
elif (Average_mark >= 80 and Average_mark <= 83):
  GPA = "3"
elif (Average_mark >= 77 and Average_mark <= 79):
  GPA = "2.7"
elif (Average_mark >= 74 and Average_mark <= 76):
  GPA = "2.3"
```

```
elif (Average_mark >= 70 and Average_mark <= 73):
  GPA = "2"
elif (Average_mark >= 67 and Average_mark <= 69):
  GPA = "1.7"
elif (Average_mark >= 64 and Average_mark <= 66):
  GPA = "1.3"
elif (Average_mark >= 60 and Average_mark <= 63):
  GPA = "1"
else:
  GPA = "0"
print ("Your Average Grade Point is : " + GPA)
```