

SECJ1013-01&05 & SCSJ1013-01&05

20192020-01

Assignment 1 (5%)

Instruction. Answer all the questions.

Question 1:

Write a program that will read two floating point numbers (the first read into a variable called `first` and the second read into a variable called `second`) and then calls the function `swap` with the actual parameters `first` and `second`. The `swap` function having formal parameters `number1` and `number2` should swap the value of the two variables.

Sample Run:

```
Enter the first number
```

```
80
```

```
Enter the second number
```

```
70
```

```
You input the numbers as 80 and 70.
```

```
After swapping, the first number has the value of 70 which was the value of the second number
```

```
The second number has the value of 80 which was the value of the first number
```

Question 2:

Write a program that will input miles travelled and hours spent in travel. The program will determine miles per hour. This calculation must be done in a function other than `main`; however, `main` will print the calculation. The function will thus have 3 parameters: `miles`, `hours`, and `milesPerHour`.

Sample Run:

```
Please input the miles traveled
```

```
475
```

```
Please input the hours traveled
```

```
8
```

```
Your speed is 59.38 miles per hour
```

Question 3:

Write a program that will determine a grade. The program should ask a number of assessments and the mark of each assessment. Notice that the range for mark is between 0 to 100. You need to find the sum and the average of the marks by using function (pass by reference may apply). Then the `main` function will determine the letter grade of that average based on a 10-point scale as listed below.

90–100	A
80–89	B
70–79	C
60–69	D
0–59	F

Sample Run:

```
Enter the number of assessments: 3
Enter mark of assessment 1 (between 1 – 100): 90
Enter mark of assessment 2 (between 1 – 100): 80
Enter mark of assessment 3 (between 1 – 100): 50
The grade is C
```