PROG20799 - Data Structures & Algorithm Development – C
Assignment 1
7.5% of your course mark

Due Dates: **Sept 22 *@11:59 PM*, Late submission is -10% per day for 3 days.**

Instructions: **This assignment is to be completed individually (This means by yourself, MUST meet and comply with Sheridan's rules on academic integrity).**

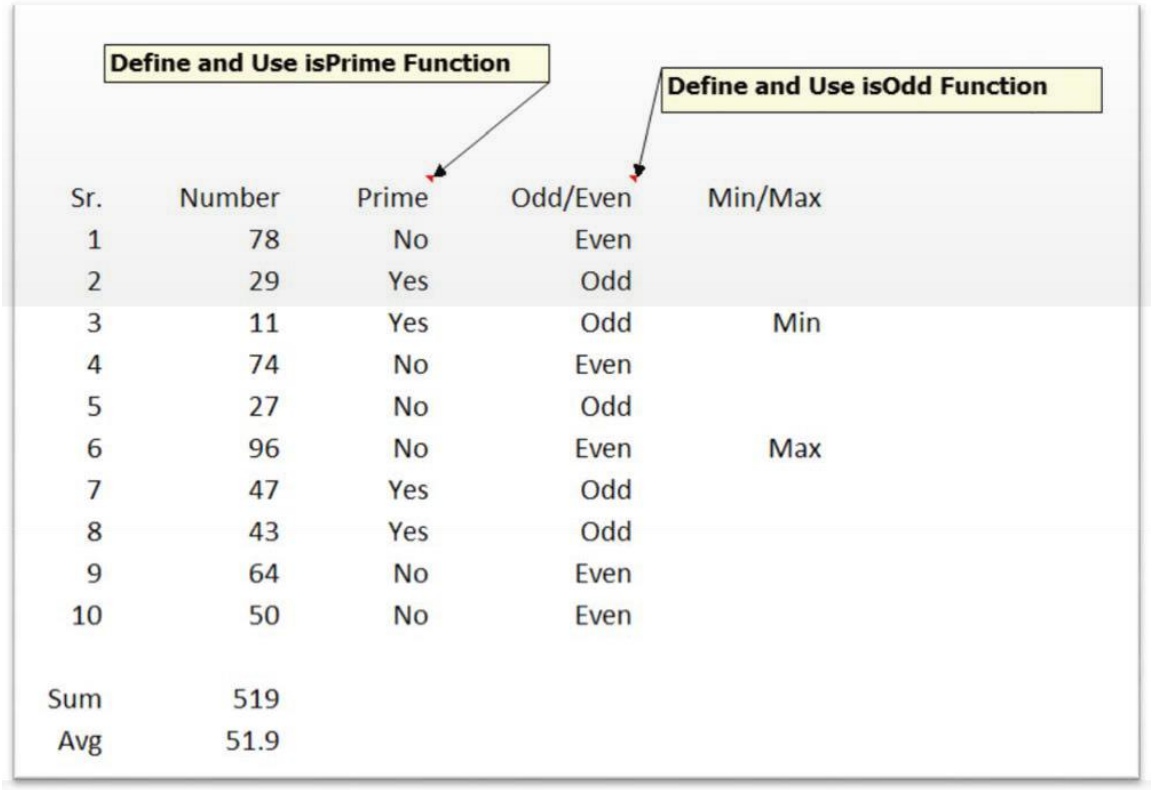
Please submit the following on SLATE

- **one (1) single document in Microsoft Word or PDF format**. Incorporating screenshots of the **code and the output** into the single document and pay attention to your format.
- A **soft copy (.c file)** for each question so your instructor can test your answer (you must submit the program regardless whether it is complete or incomplete, correct or incorrect).

Please note:

- Submission multiple pdf or doc files (instead of one document) will not be marked.

Your teacher may ask you to explain your answers to ensure you had done your own work.



Sr.	Number	Prime	Odd/Even	Min/Max
1	78	No	Even	
2	29	Yes	Odd	
3	11	Yes	Odd	Min
4	74	No	Even	
5	27	No	Odd	
6	96	No	Even	Max
7	47	Yes	Odd	
8	43	Yes	Odd	
9	64	No	Even	
10	50	No	Even	
Sum	519			
Avg	51.9			

Question: (15 marks)

1. Write a program using C language to generate the above output after reading user input in an array:
    a. Display array values
    b. Define and use isPrime function to check whether number is prime or not
    c. Define and use isOdd function to check whether number is odd or not
    d. Mark “Min” if number is Minimum within the array
    e. Mark “Max” if number is Maximum within the array
    f. Calculate and display the sum of all the elements of the array
    g. Calculate and display the average of all the elements of the array

2. Use the printf function to suitably format and display the output
3. Write appropriate comments in the program

Notes:

- **You are required to complete this assignment WITHOUT ANY OUTSIDE COLLABORATION/HELP.**