

**Department of ICT  
Faculty of Technology  
University of Ruhuna**

**Programming Practicum – ICT1142**

**Level 1- Semester 1**

**Lab Sheet 05**

**| 2022**

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**Objective:**

To familiarize with flow charts and pseudo codes.

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**Exercise 01**

- a) Draw a Flowchart to input the length and width of a shape and check whether it is a square or not.
- b) Write a pseudo code for part (a).
- c) Convert your pseudo code in to the C program.

**Exercise 02**

- a) Write a pseudo code that inputs two numbers (a and b) and output the smallest number among them.
- b) Draw a flow chart for the above scenario.
- c) Convert your flow chart in to the C program.

**Exercise 03**

- a) Develop an algorithm by using flow chart to display the numbers 1, 2, 3, 4, 5, ....., 100.
- b) Write a pseudo code for the given scenario.
- c) Convert your pseudo code in to the C program.

**Exercise 04**

- a) Write a pseudo code that inputs ten numbers and outputs the sum and average of them.
- b) Draw a flow chart for part (a).
- c) Convert your flow chart in to the C program.

### **Exercise 05**

To travel from home to Ruhuna university, a particular student needs to take three buses. Input the fares of each bus and estimate the traveling expenditure of the student for the entire semester. (Assume that there are 5 days per week and 15 weeks for the semester).

- a) Write a pseudo code for above question.
- b) Draw a flow chart for above question.
- c) Convert your pseudo code into the C program.

### **Exercise 06**

- a) Draw a flow chat to find the largest among three different numbers entered by the user.
- b) Write a pseudo code for above scenario.
- c) Convert your pseudo code in to the C program.

### **Exercise 07**

- a) Write a pseudo code to input numbers from the user and check whether it is even or odd.
- b) Draw a flow chart for above scenario.
- c) Convert your flow chart in to the C program.

### **Exercise 08**

- a) Draw a flow chart to calculate area and perimeter of rectangle.
- b) Write a pseudo code for it.
- c) Convert your pseudo code in to the C program.

### **Exercise 09**

- a) Write a pseudo code to check a number is positive or negative.
- b) Draw a flow chart for above scenario.
- c) Convert your flow chart in to the C program.