**Study Sheet -2** **|** Lower Secondary

Stage (6-8)

1st Semester | 2023-2024

|  |  |
| --- | --- |
| **Subject:** ICT | **Chapter:** 3 (programming language) |
| **Objectives:**   * How to use the Python programming language for input and output. | |

**A program flowchart is a diagrammatic way of representing an algorithm used to solve a problem. A flowchart consists of symbols, connected by arrows that indicate the path to be followed when working through the flowchart. Each different shape symbol represents a different stage in the process.**

|  |  |  |
| --- | --- | --- |
| **Symbol** | **Name** | **Action** |
|  | **Start / Stop** | **This shape shows the beginning and end of a sequence.**  **A sequence is the order in which one task follows another.** |
|  | **process** | **This shape shows a command.**  **A command is a specific instruction.** |
|  | **Decision** | **This shape shows a “Yes” or “No” decision.** |
|  | **Input /Output** | **This shape shows where data are being received or sent from a computer program.** |
|  | **Arrows** | **These arrows show the way we move through the sequence from symbol to symbol.**  **The direction of flow.** |

1. **Draw a flowchart to calculate and print the Area of a rectangle.   
   Convert the flowchart to a Python program.**

**Formula 🡪 A=L\*W**

A: Area

L: Length

W: Width

1. **Draw a flowchart to input, calculate and print the average of three numbers. Convert the flowchart to a Python program.**

A: Number1

B: Number2

C: Number3

**Formula 🡪 Average=(A+B+C)/3**