

PENANG SANGAM HIGH SCHOOL
P.O.BOX 44, RAKIRAKI
LESSON NOTES 17



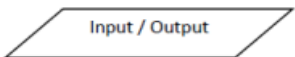
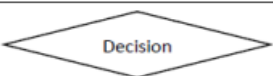

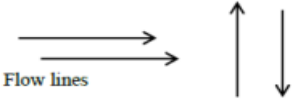

Year/Level: 12 **Subjects: Computer Studies**

Strand:	CE Strand: CE 2 Application Packages
Sub-strand:	CE 12.2.1 Visual Basic.NET Programming (VB NET)
Content Learning Outcome:	Flow chart symbols, logical structures, Pseudocode Writing

Lesson Notes

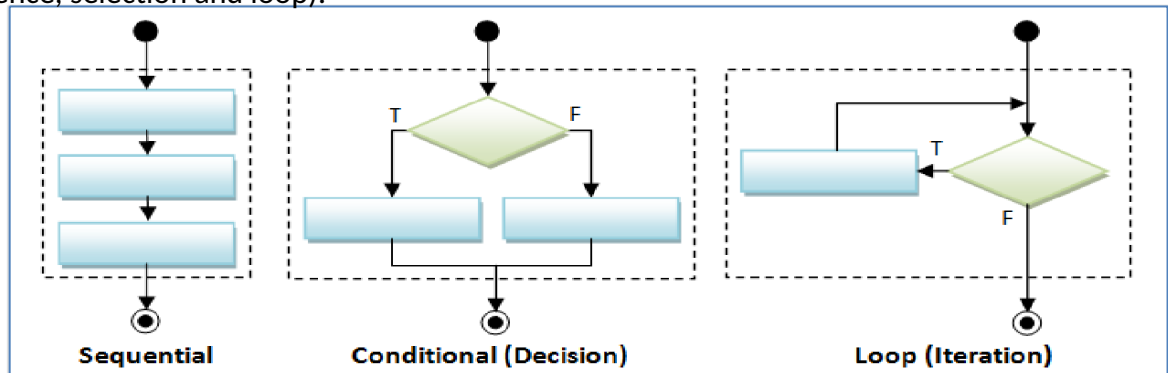
Flow Chart Symbols

- ❖ A flowchart is a diagrammatic representation of a program or a graphic representation of the steps needed to solve the programming problem.
- ❖ A flowchart is an outline that depicts (shows) events or actions and the sequence in which the actions must be taken to correctly solve the problem.

Flowchart Symbols	Explanation
	Indicates the beginning and end of a program.
	Indicates that a calculation should be performed or assigning a value to a variable.
	Indicates an input/read or an output operation
	Allows alternate courses of action based on a condition. A decision indicates a question that can be answered as yes or no or true or false
	Is used to determine lengthy flow lines. Its use indicates that one symbol is connected to another.
	Indicates the order in which operations should be performed.
	Indicates that statements need to be repeated or iterated.

Logical Structures

- Logic structures are the arrangements of programming statements. Three types are (sequence, selection and loop).



Sequence – one program statement followed by another

Selection (if-then-else) – when a decision must be made

Repetition/Iteration/loop – when a process is repeated until a condition is true

Pseudocode Writing

Also known as Structured English, allows a programmer to use English like sentences to write an explanations of what the program is supposed to do.

Example

1) Write the Pseudocode to calculate the average of three numbers

Start Procedure

Input three numbers

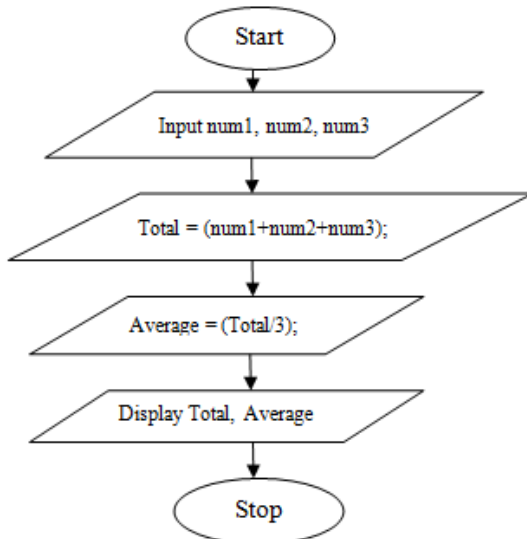
Calculate Total = Number1 + Number2 + Number3

Calculate Average = Total/3

Display Average

End of Procedure

2) Draw a flowchart to find sum of three numbers and display average. Write a Pseudo code of the program.



Pseudocode

Start procedure

Input num 1, num2, num3;

Total = (num1 + num2 + num3);

Average = (Total/3);

Display Total, Average

End procedure

Questions

- 1) Draw a flowchart to find the sum of two numbers and display the sum.
- 2) Draw a flowchart that reads the age from the user and displays whether the person is eligible for voting or not. (Note that voting age in Fiji is 18 and above)
- 3) Draw a flowchart to find sum of two numbers and display average. Write a Pseudo code of the program. Name the logic structure being used.