

# Introduction to Computer

## Lecture #21

### Topics

- 1: Control Structure ?
- 2: Types of Control Structure?
  - 2.1: Sequential Structure
  - 2.2: Selection Structure
  - 2.3: Repetition Structure

# Control Structure

- A statement used to control the flow of execution in a program is called control structure .
- Control structures are used to implement the program logic.

# continue.....

- The instructions in a program can be organized in three kinds of Control Structures to control execution flow . Control Structures defines the flow of execution in a program.

# Types of Control Structure

Three Types of Control Structure are as follows:

- (1): Sequential Structure
- (2): Selection Structure
- (3): Repetition Structure

# (1) Sequential Structure

- The *sequence structure* is built into C++.
- the computer executes C++ statements one after the other in the order in which they're written—that is, in sequence.
- example
- The UML **activity diagram** illustrates a typical sequence structure in which calculations are performed in order. C++ allows you to have as many actions as you want in a sequence structure.

## (2) Selection Structure

- Selection structures are used to perform '**decision making**' and then branch the program flow based on the outcome of decision making. Selection structures are implemented in C/C++ .
- Example
- with If, If Else and Switch statements. If and If Else statements are 2 way branching statements where as Switch is a multi branching statement.

## (3) Repetition Structure

- **Repetition** statements are called loops, and are used to repeat the same code multiple times in succession.
- Example
- The three loop **structures in C++** are: while loops. do-while loops

# THANKS TO ALL

Best of luck

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