Class 2

Variable:

* name
* value
* data type

The main data types are:

* int (5)
* float (5.5)
* double (5.5)
* char ('a')
* boolean (true)
* byte
* short
* long

We can store data in variables. If we want to use a variable, we must declare it.

Declaration: type name = value;

**Example 1:** Create a varible called x which is an integer number whose value is 5.

in JAVA: int x = 5;

**Example 2:** Create a varible called b which is a boolean type varible whose value is false.

in JAVA: boolean b = false;

CLASS 3

Decision making structures have one or more conditions to be evaluated or tested by the program, along with a statement or statements that are to be executed if the condition is determined to be true, and optionally, other statements to be executed if the condition is determined to be false.

**If-else structure:**

if(condition){

instructions; These instructions will be executed if the condition is true.

}

else{

instructions; These instructions will be executed if the condition is false.

}

In the conditions, comparison operators can be used.

**Comparison operators:**

1. less than: <
2. greater than: >
3. less than or equal to: <=
4. greater than of equal to: >=
5. equal: ==
6. inequality: !=

**Logical operators:**

1. and: && (cond1 && cond2 is true when both are true)
2. or: || (cond1 && cond2 is true when at least one is true)
3. not: !