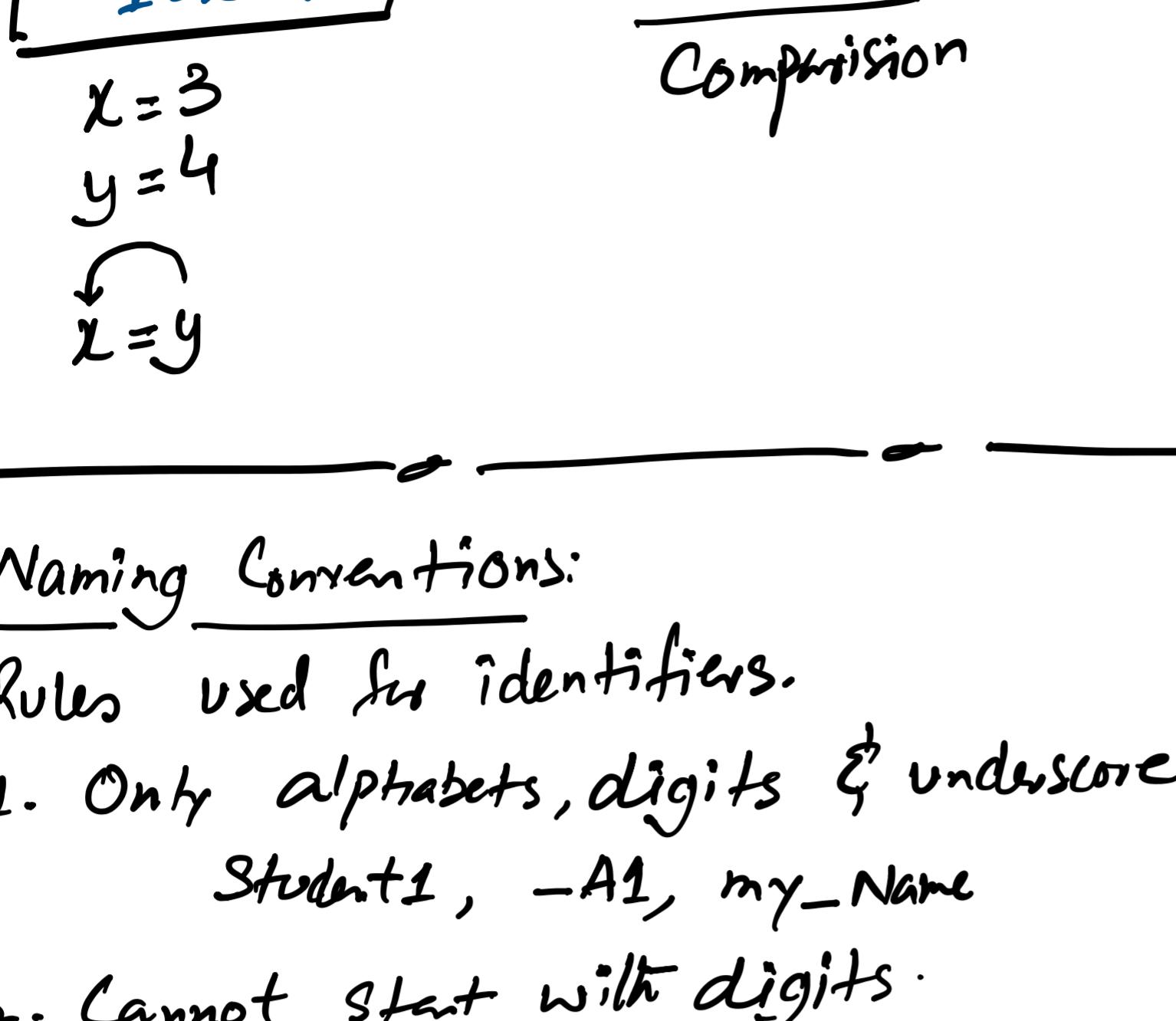
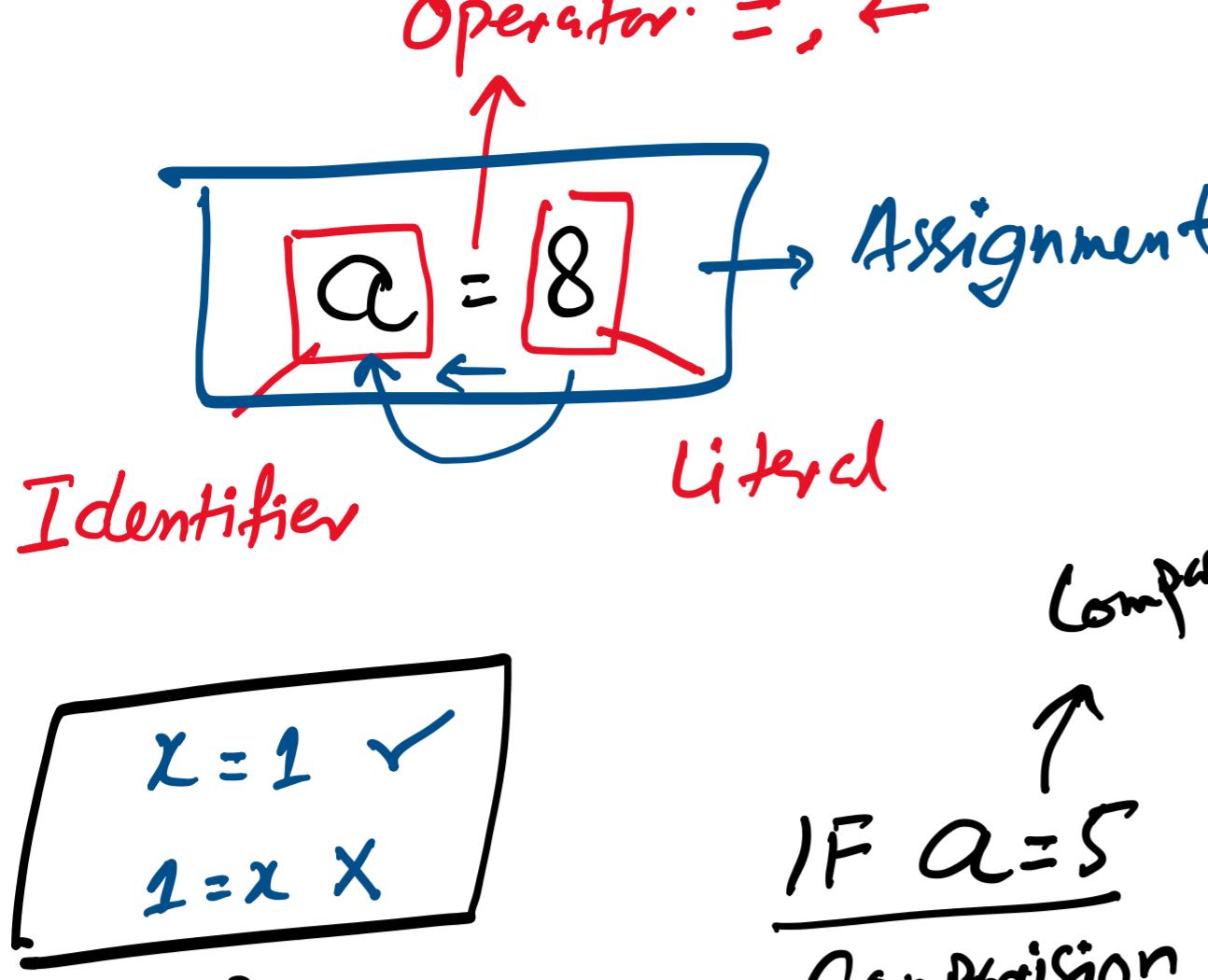


## Data Types

Tuesday, 1 December 2020 9:11 AM



### Naming Conventions:

Rules used for identifiers.

1. Only alphabets, digits & underscore can be used.

Student1, -A1, my\_Name

2. Cannot start with digits.

-A3, D3,

IDX

3. No special symbols are used.

NY\$me, my Name.

4. No keywords.

IF, ELSE, SELECT, WHILE, CASE .... X

5. Length  $\leq 255$ .

### CONSTANT:

Pseudocode:

CONSTANT taxRate = 23.75

Visual Basic:

Const taxRate = 23.75

### Data Structures

- Variable

- Array

- Constant

- STACK

- QUEUE

- LINKED LIST

### Introduction

INTEGER = 4B

### DECLARATION:

$x = 45$

x Limit 2

PSEUDOCODE:  
DECLARE x : INTEGER  
4B



### Pseudocode:

DECLARE myName : STRING.

### Visual Basic:

DIM myName AS String

### Initialisation:

Whenever a new variable is declared, it takes some area of main memory.

This occupied space might already have some data from the previous program loaded at the same location before our current program.

This data from previous program is now garbage and is automatically assigned to newly created variable.

This garbage data is unwanted and needs to be removed.

The removal of the garbage data before using the variable is called "Initialisation".

### Data Types:

#### Pseudocode

#### Initialisation

INTEGER

0  $\leftarrow 0$

REAL

0.0  $\leftarrow 0.0$

CURRENCY

0.0  $\leftarrow 0.0$

TEXT/STRING

""  $\leftarrow$  Null

CHARACTER

''  $\leftarrow$  Null

BOOLEAN

#FALSE#  $\leftarrow$  graduated

DATE

#FALSE#  $\leftarrow$  graduated

TIME

#### Visual Basic.net

#### Initialisation

Integer

0  $\leftarrow 0$

Single

0.0  $\leftarrow 0.0$

Decimal

0.0  $\leftarrow 0.0$

String

""  $\leftarrow$  Null

Char

""  $\leftarrow$  Null

Boolean

False  $\leftarrow$  graduated

Date

isSorted  $\leftarrow$  False

Timer

/

Date & time are not initialised.

If you like to set them then set them at the current date & time.