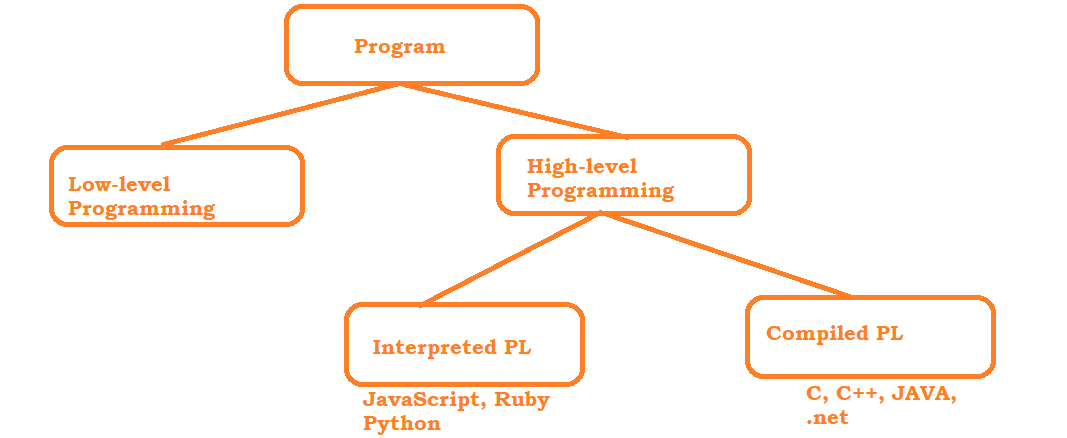
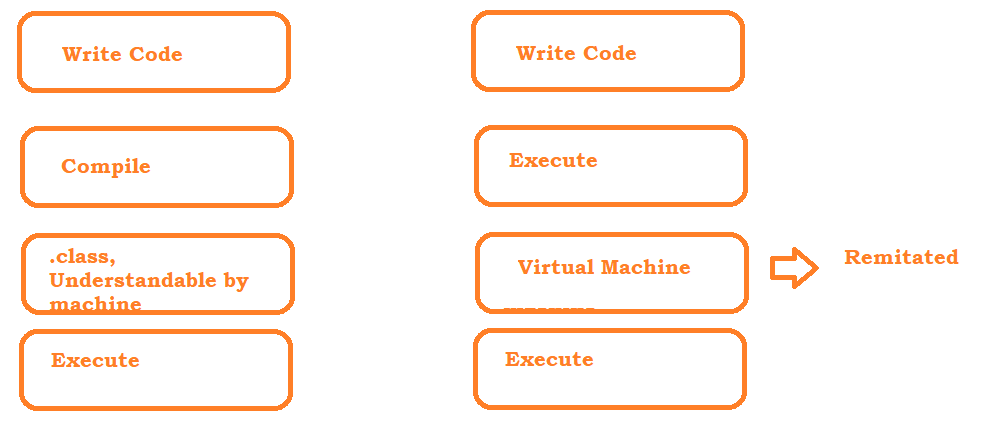
Java Script

Java Script is a high level, Object oriented and Interpreted programming language



# High level Difference :



# Components of Interpreter

# 

## Executing Java Script on Browser

Open browser -> press 12 -> go to console 🡪 execute javascript code

## Executing Java Script on Windows Machine

* Install nodejs on your machine
  + <https://nodejs.org/en/download/package-manager>
  + Open power shell and execute below commands

**# installs fnm (Fast Node Manager)**

* + winget install Schniz.fnm

**download and install Node.js**

* + fnm use --install-if-missing 20

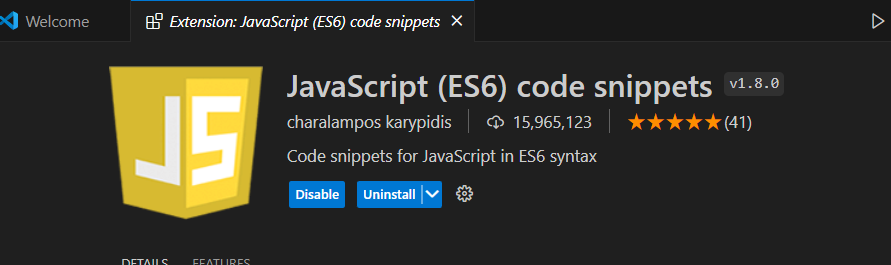
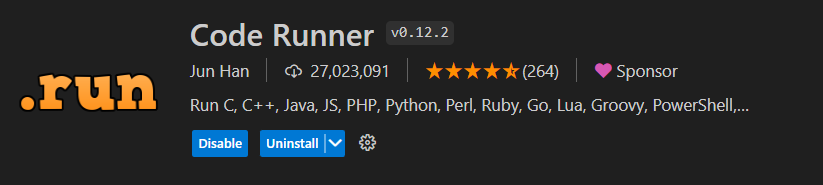
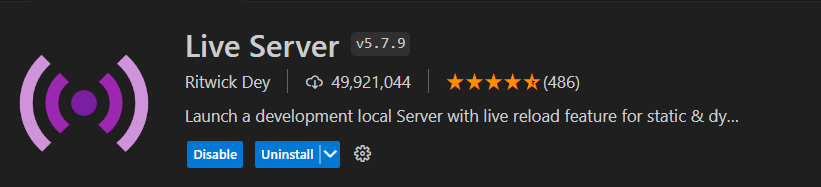
**# verifies the right Node.js version is in the environment**

* + node -v # should print `v20.14.0`

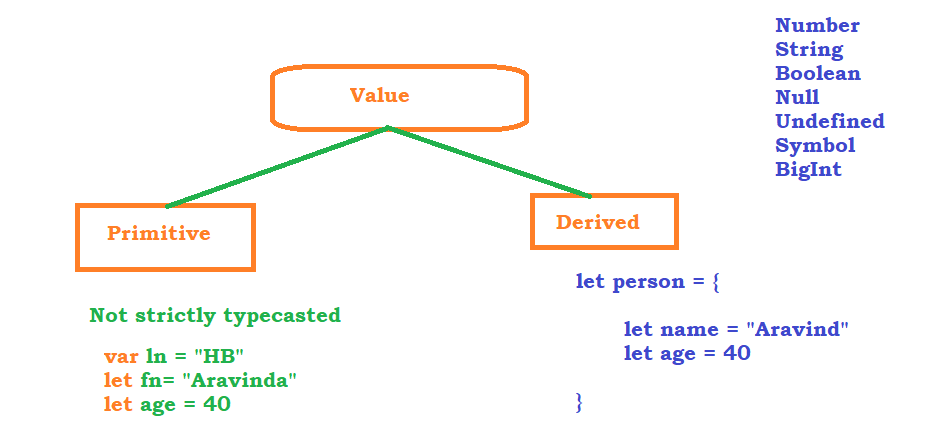
**# verifies the right NPM version is in the environment**

* + npm -v # should print `10.7.0`

Visual Studio Code Editor

* Download the software : <https://code.visualstudio.com/download>
* Follow the instructions OR installation steps
* Add Extensions :
  + 
  + 
  + 

# Data types and variables :



Operators in JS

# Arithmetic Operators

* Addition -> +
* Subtraction -> -
* Multiplication -> \*
* Division -> /
* Module -> %
* Exponential -> \*\*
* Increment -> ++

# Assignment Operators

* Assign = x=y
* Add and Assign += x+=y x = x+y
* Sub and Assign -= x-=y x = x-y
* Mul and Assign \*= x\*=y x = x\*y
* Div and Assign /= x/=y x = x/y
* Mod and Assign %= x%=y x = x%y
* Exp and Assign \*\*= x\*\*=y x = x\*\*y

# Comparison Operators

* Check equal value == x==y
* check equal value and type === x===y
* Check not equal value != x!=y
* check not equal value and type !== x!==y
* Greater than > x>y
* Less than < x<y
* Greater than equal >= x>=y
* Less than equal <= x<=y
* Ternary Operator ?: (x>y)?x:y

# Logical Operators

* Logical AND && x &&y
* Logical OR || x||y
* Logical NOT ! !x

# Type of Operators

* typeOf
* instanceOf

Conditional Statements

* if
* if, else
* if, elseif, .. else
* switch

Looping Statements

* for
* for each
* while
* do while
* for in
* for of

Jasmine

Protractor