What is Programming ??

→ Programming means we try to provide a set of instructions to a computer machine to achieve some task.

(Computer → electronic) → Binary
                                0 or 1

Programming Languages

C++, Java, Javascript, Python, Ruby etc

Javascript $\rightarrow$ ecma script

↳ JS has nothing to do with Java.

$\rightarrow$ Instruction 1
$\rightarrow$ Instruction 2
$\rightarrow$:

execute → Results
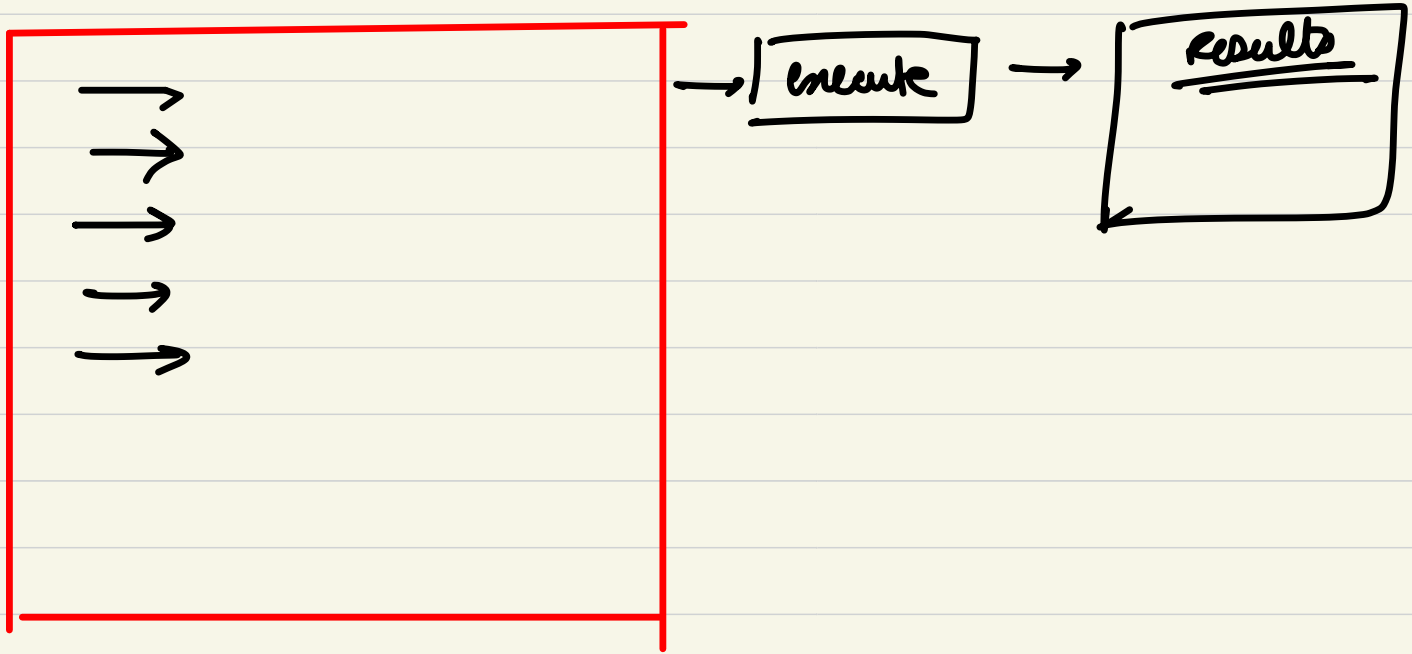
→ Console.log ("My text")

Let's say I want to write some text

Javascript

→ web apps

→ mobile apps

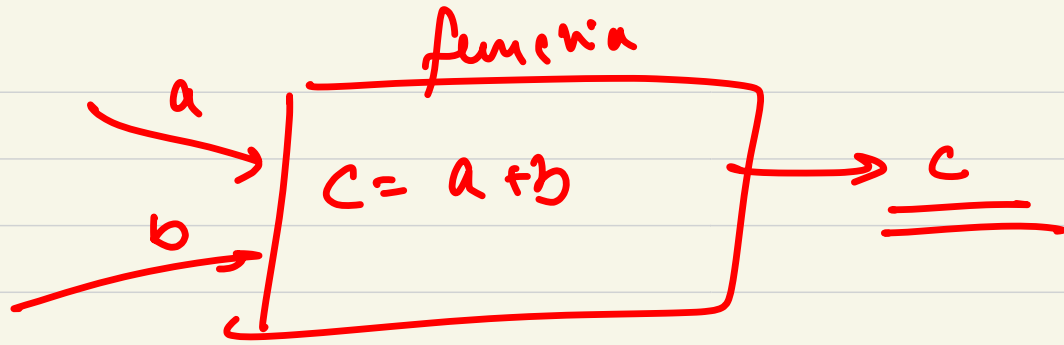→ server side logic

→ ML

Different Programming Paradigm.

1) **Procedural** → we just write a set of instructions that computer has to follow, these set of instructions are well organized, and explicitly explain the task to our **computer**.

Declarative → We don't give detailed set of instruction about how to do a task, instead we just tell what is the task & the language itself figures it out.

Object Oriented Programming

Blueprint → design

Blueprint → class

we create actual instances Called as Objects
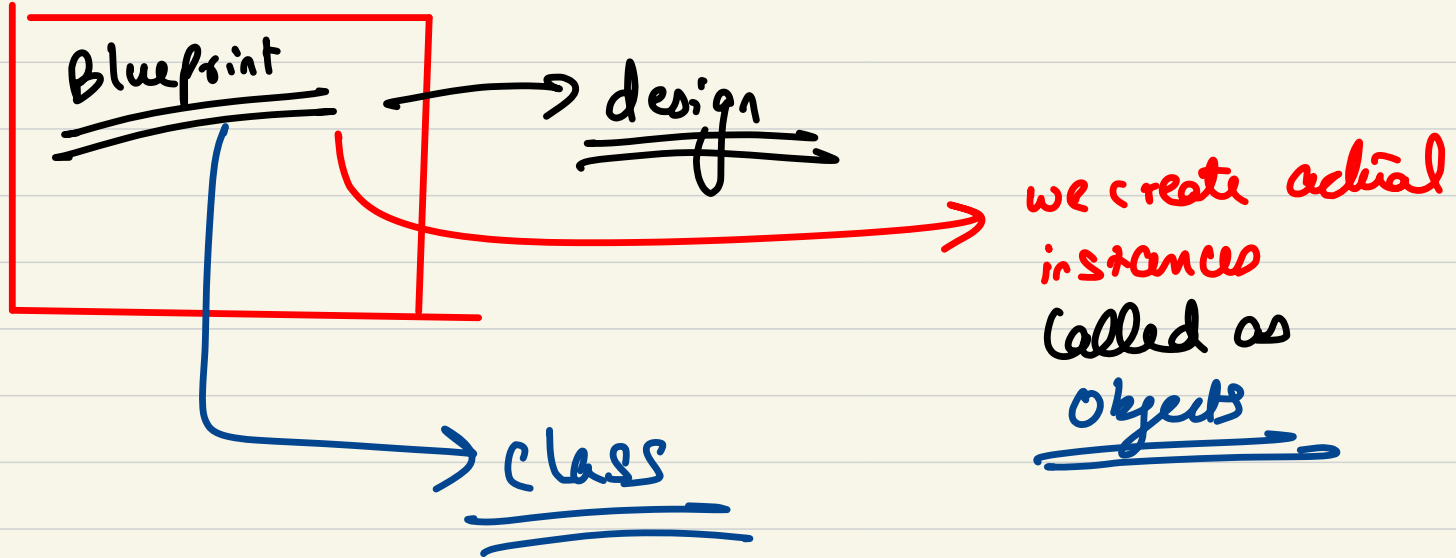
functional programming

fumcria

$c = a + b$

a →

b →

→ c

Declarative → <u><u>SQL</u></u>

Procedural → C, C++, Pytha, Java , JS

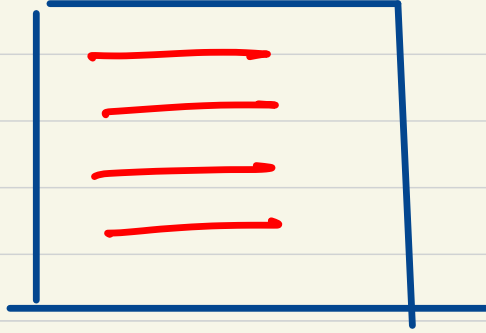Object oriented → C++, Pythn , Jam , JS

functional → lisp , Java, C++ , JS

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Sanket,
Rahul,
Sonpal
Paval,
] Mohommad,

3 types of programming languages based on their nature of execution.

1) Compiled

2) Interpreted (scripted)
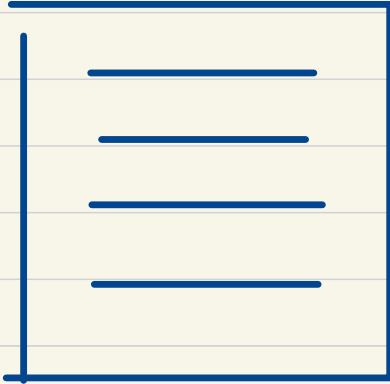
3) hybrid

C, C++ ← **Compiled** → **Compiler**

In compiled languages, the compiler provided by the language, reads the whole code without starting the execution. While ready if any error is found after some correct lines of code, then also it terminates the program.

Shell script → Interpreted → Interpreter

Interpreter doesn't read the whole code at once, instead it reads instruction one after other & immediately executes it. The moment it encounter any error, it stops the program execution.

hybrid → compiled
                +
         → interpreted

JS, Java, Pytha