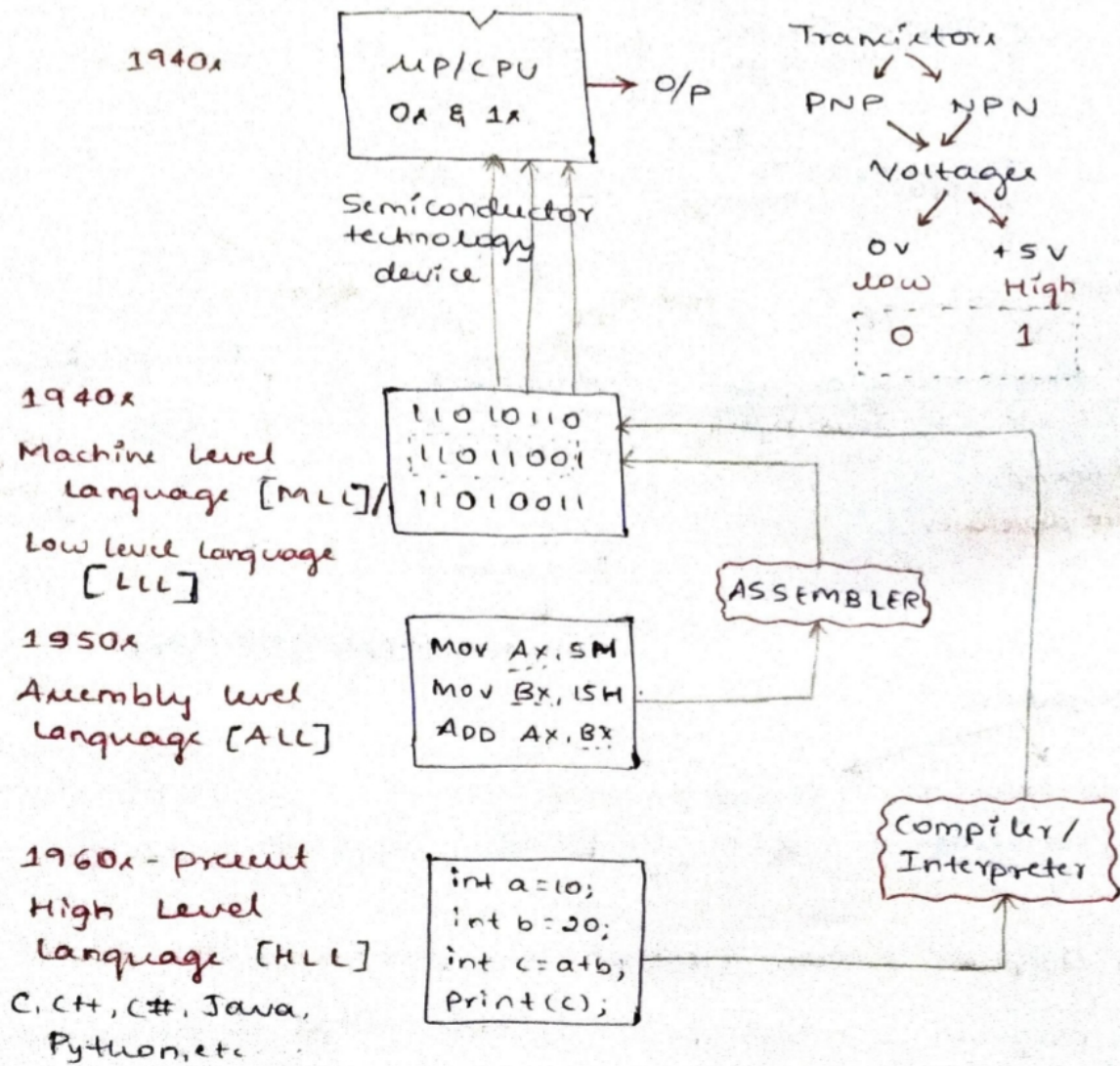


Classification of Programming Language



1940x
MLL
Binary Sequence

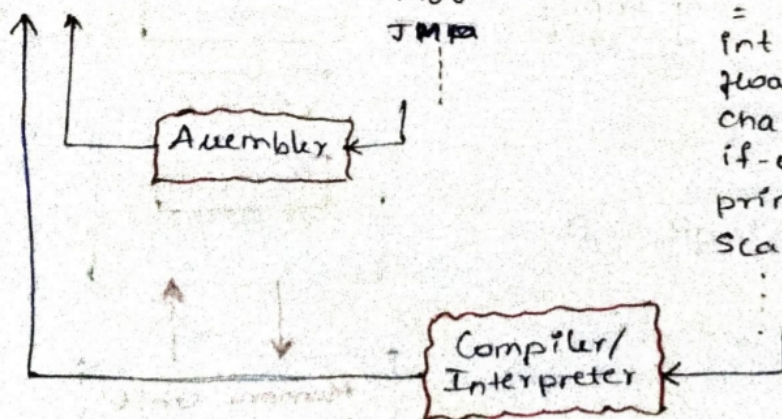
11010101 OPCODE
101101101
11001010
10111010

1950x
ALL
Mnemonic

ADD
SUB
MUL
DIV
MOV
JMP

1960x
HLL
Symbol and English like Statement

+
-
*
/
=
int
float
char
if-else
printf
scanf



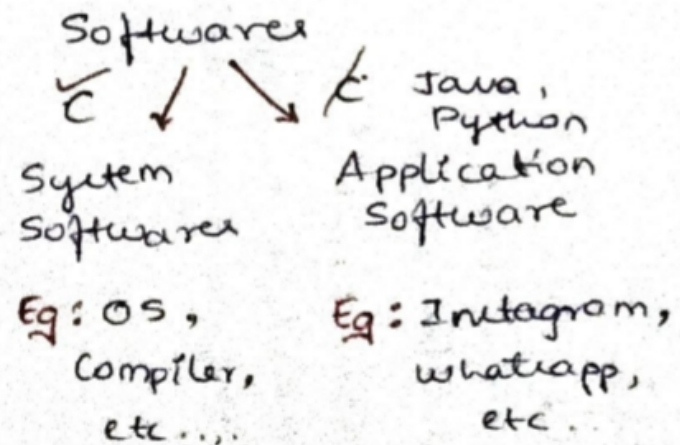
- An Assembler is a System Software which takes All program as input and Converts it into MLL Code.
- A Compiler or an Interpreter is a System Software which takes HLL program code as input and Converts it into MLL Code.

Programming Paradigm:

- 1) Unstructured / Non-structured Programming.
→ Single block (function)
- 2) Structured / Procedure-oriented Programming (POP)
→ Multiple block (functions)
- 3) Object Oriented Programming (OOP)
→ Class and Objects

2 Components of a program

1. Data
2. Functions



1972

C

BCPL



B

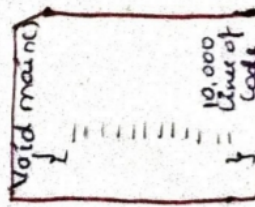


Dennis Ritchie
Bell Labs, USA

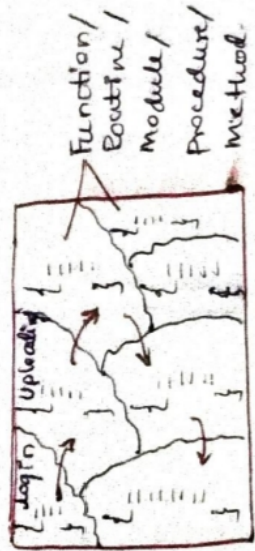
* Structural /
Procedure-oriented
Programming (POP)

Unstructured

FORTAN



• Small and
Simple Task



• Large and
Complex Task

• Data ↓
• Function ↑
• Extremely fast

HLL Popular
(1960s)

1979

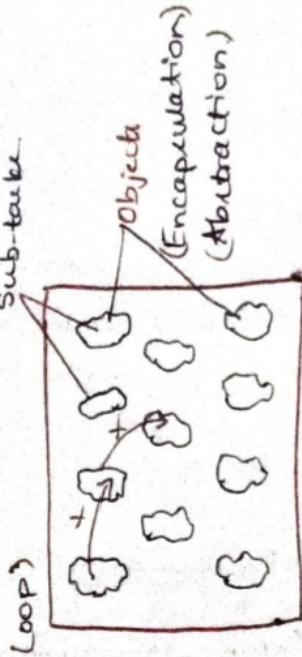
Bjarne Stroustrup
Bell Labs, USA

C (POP) Simula (OOP)

"C with classes"

1985

C++



• Data ↑
• Function ↓

1990's

Internet

Sun Microsystems
California, USA
[Silicon valley]

1991

James Gosling

11 Members

Green team

~~C++~~



1995
JDK
Open Source
Freely available

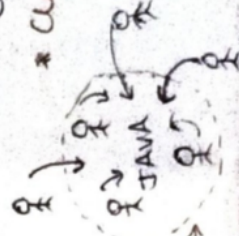
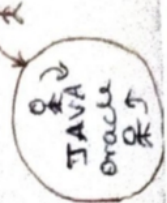
~~C++~~

Green
SUN
JAVA

SOLD-IBM X

Oracle Corp

* Closed Source



Netscape
Browser