



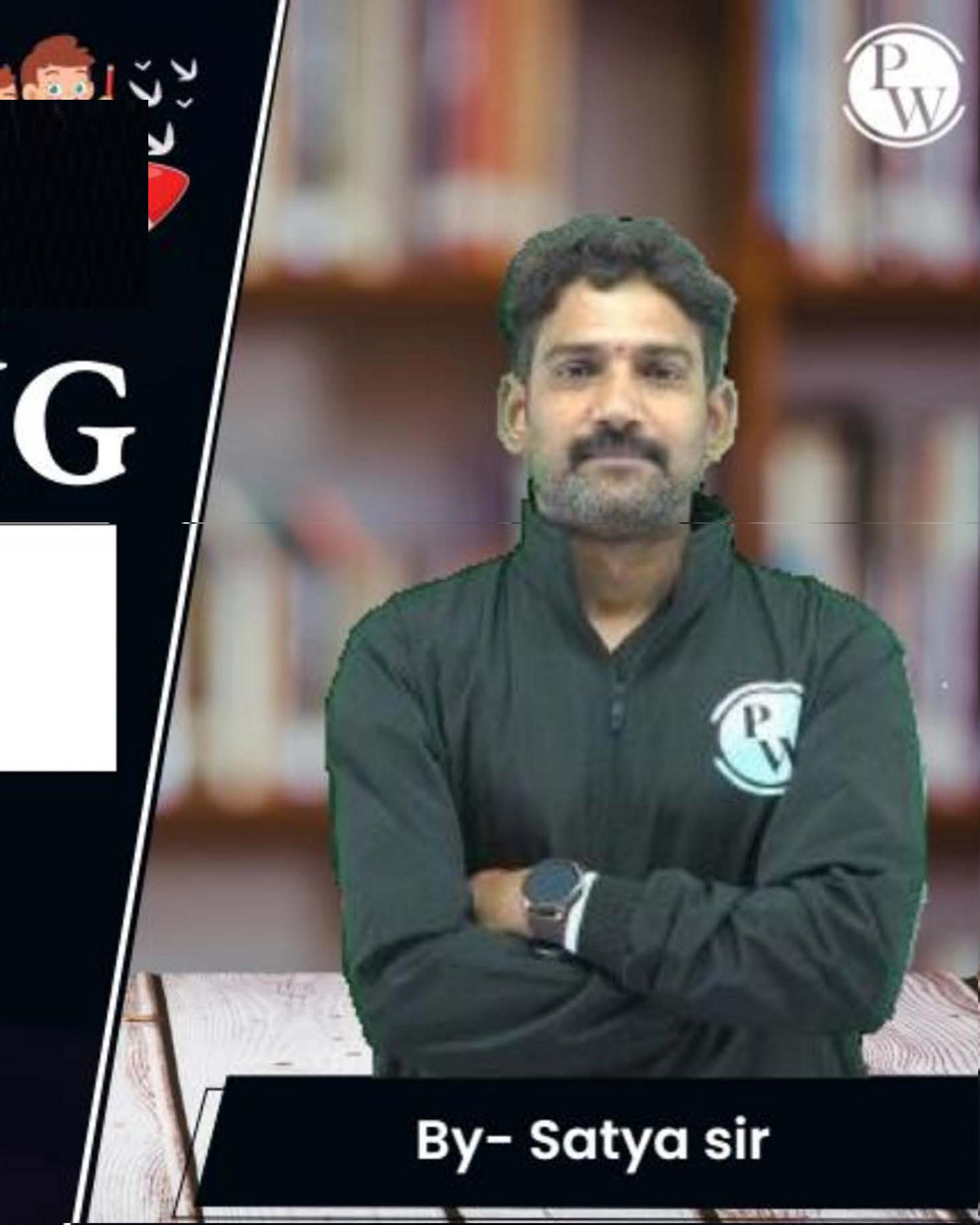
CS & IT ENGINEERING

C-Programming

Fundamentals

C Programming Fundamentals

Lecture No.- 04



By- Satya sir

Recap of Previous Lecture



Types of Programming Languages



- Low - Level Languages :



Machine Language
L Binary Language

- High - Level Languages :

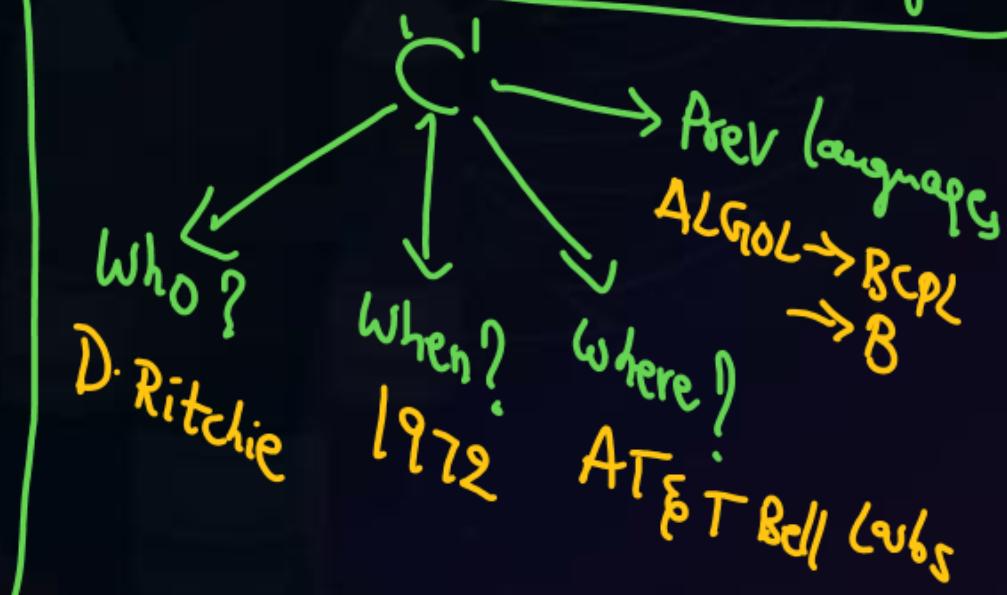


Assembly - Language

L Symbolic Language

C
C++
Java
Python
Pascal

- Fortran
- Basic
- COBOL
- Perl
- PHP
- JS ...



Topics to be Covered

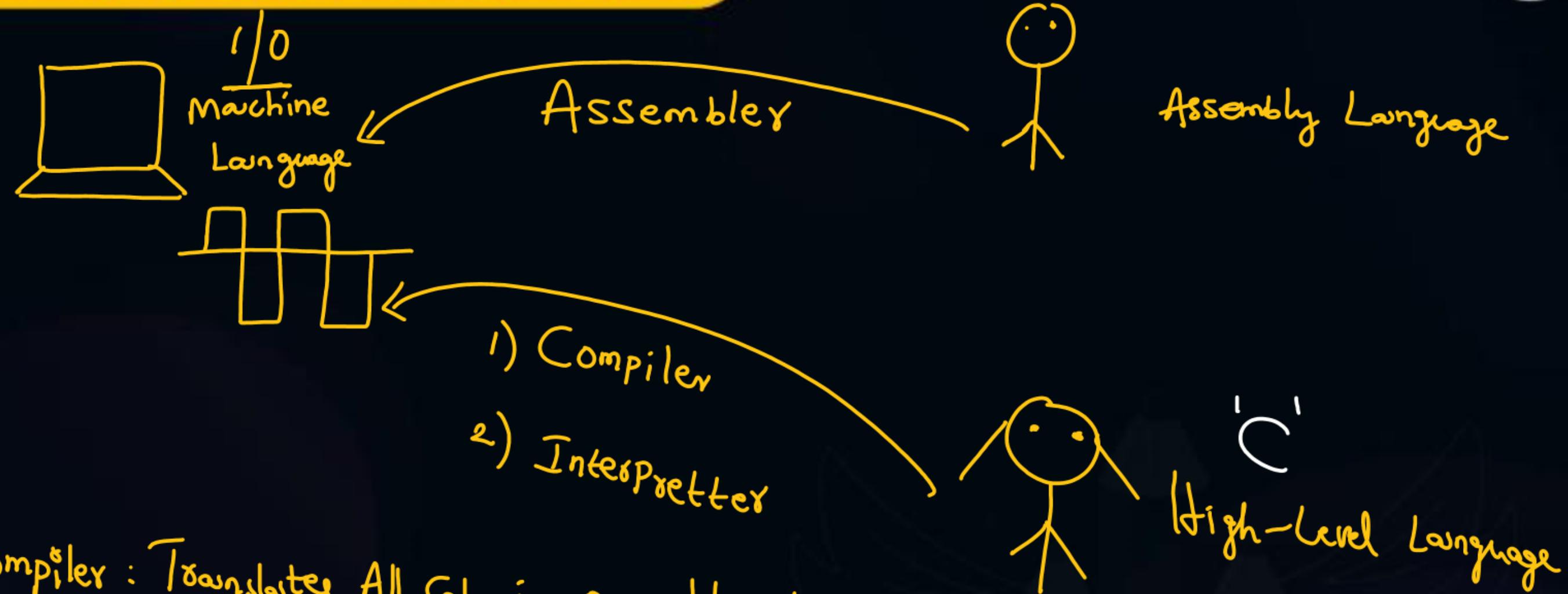


- Translators
- Variables
- Expressions





Topic : Translators, Variables, Expressions



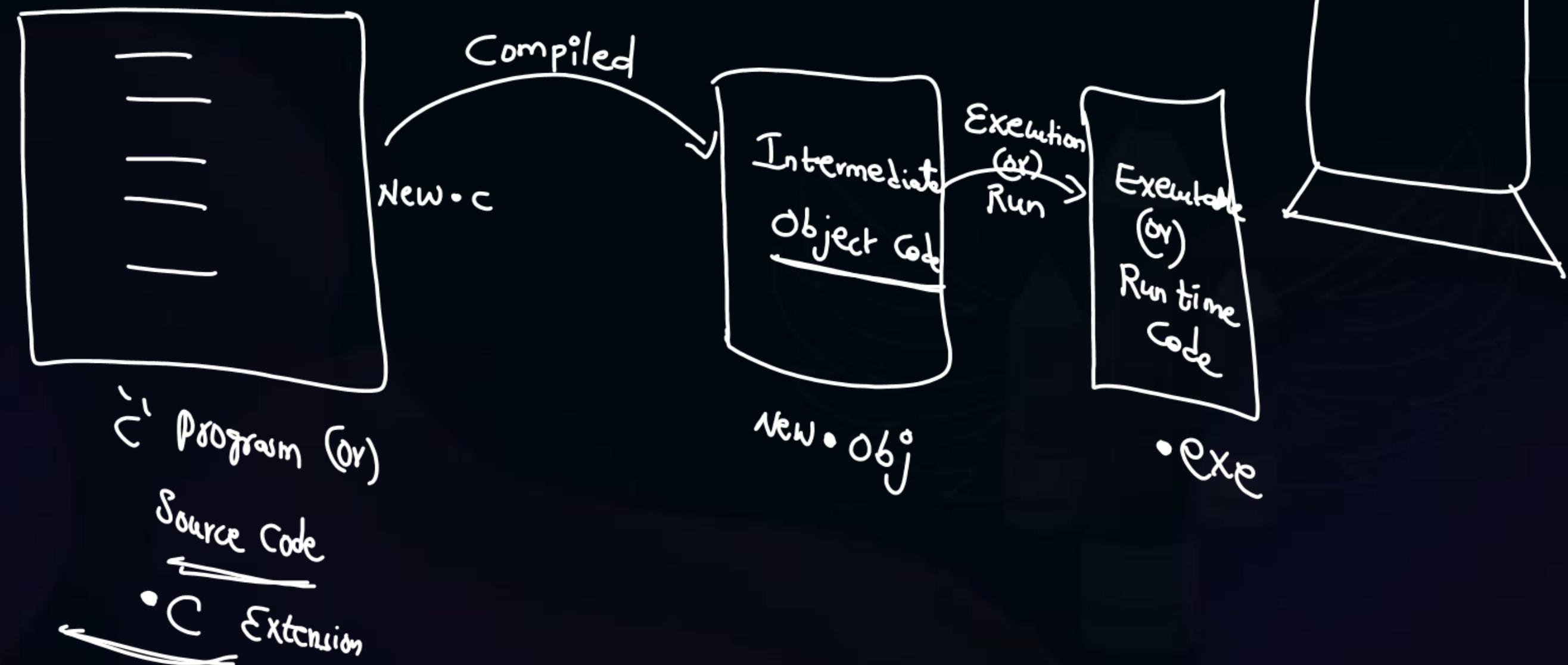
Compiler : Translates All Code in One attempt - Fast, Less Effective : C, C++, Java
Interpreter : Translates Line by Line - Slow, More Effective : Java, Python



Topic : Translators, Variables, Expressions



Source Code
[Any High level Lang stmts]
'C' Language statements





Topic : Translators, Variables, Expressions



Variables : The data, whose value is not fixed is said to be variable.

Number_of_months_in_a_year = Fixed (Constant)

Number_of_days_in_a_month = Variable

Number_of_hours_DAY = Constant

Total_marks_GATE_ExAM = Constant

Obtained_marks_GATE_ExAM = Variable

ATM_Pin = Variable

Aadhar_number = Variable

PAN_Number = Variable



Topic : Translators, Variables, Expressions



Expressions : Any executable statement is called an Expression

- These are classified into many types :

→ `int a;` - Declaration Statement

→ `int a=5;` - Initialization Statement

→ `{ main()` - Function Definition Statement

}

→ `x = a + b * 3 - c / d + 4`

- Computational (or)
Calculation Statement

→ `scanf("...");`

`getch();`

`getsc();`

`getchar();`

}
input
statements

→ `printf("...");`

`putchar();`

`puts();`

}
Output
statements



Topic : Translators, Variables, Expressions



- if (a > b) \Rightarrow Decision making statements / Conditional statements
- while() / do-while() / for() \rightarrow Looping statements (or) Iterative statements
- $f(\underline{\hspace{2cm}})$
 - $\{ \underline{f();} \}$ \rightarrow Reversible Statement
- $a = b$ \rightarrow Assignment Statement



2 mins Summary



- Translators
 - Assembler
 - Compiler
 - Interpreter
- Variables
- Types of Expressions.



Practice 'C' - by Yashwant Kankekar

THANK - YOU