

- Extensible.
- Embeddable.
- Robust.

Platform dependent languages.

17/10/23
Tue

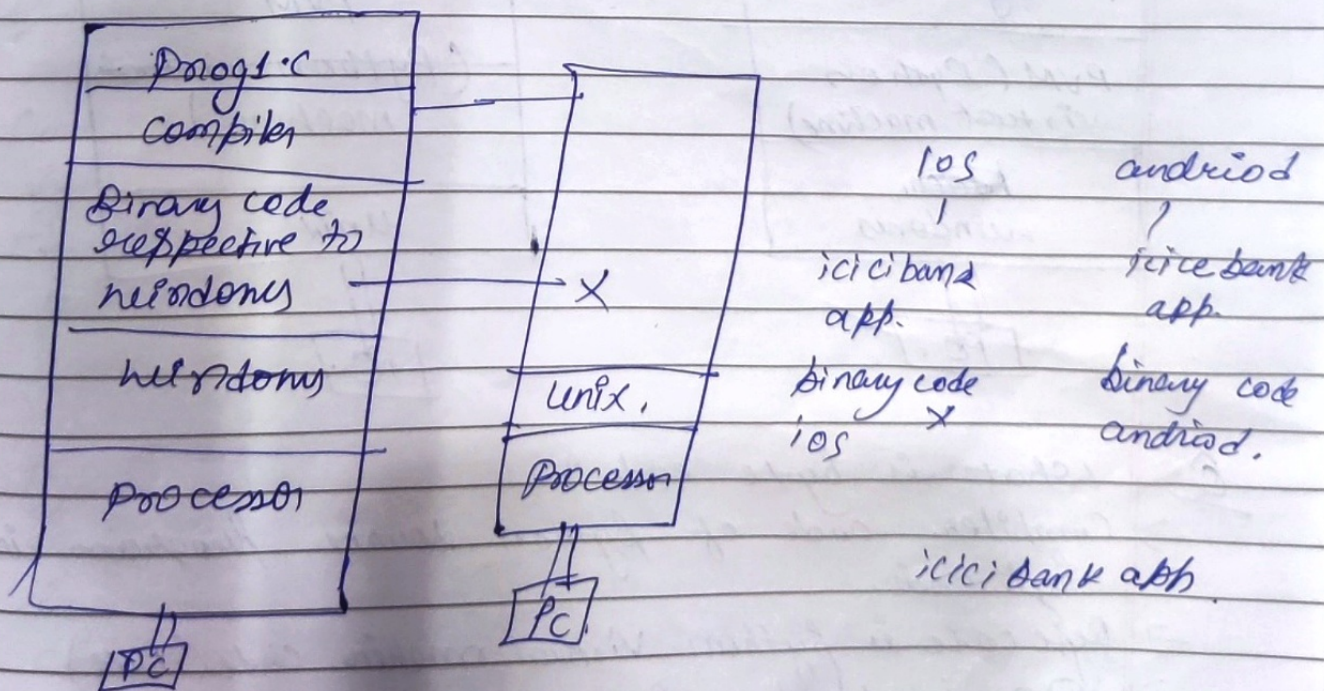
→ C, C++ are called platform dependent languages.

In platform dependent languages, dependent environment & execution environment must same.

Q Why C, C++, are called platform dependent language.

→ C, C++ programming lang. data representation is not same.

→ C++, C, compilers generate native code (or) binary code respective to OS. This code is platform (or) OS dependent.



→ C, C++ programming lang. provides data types.

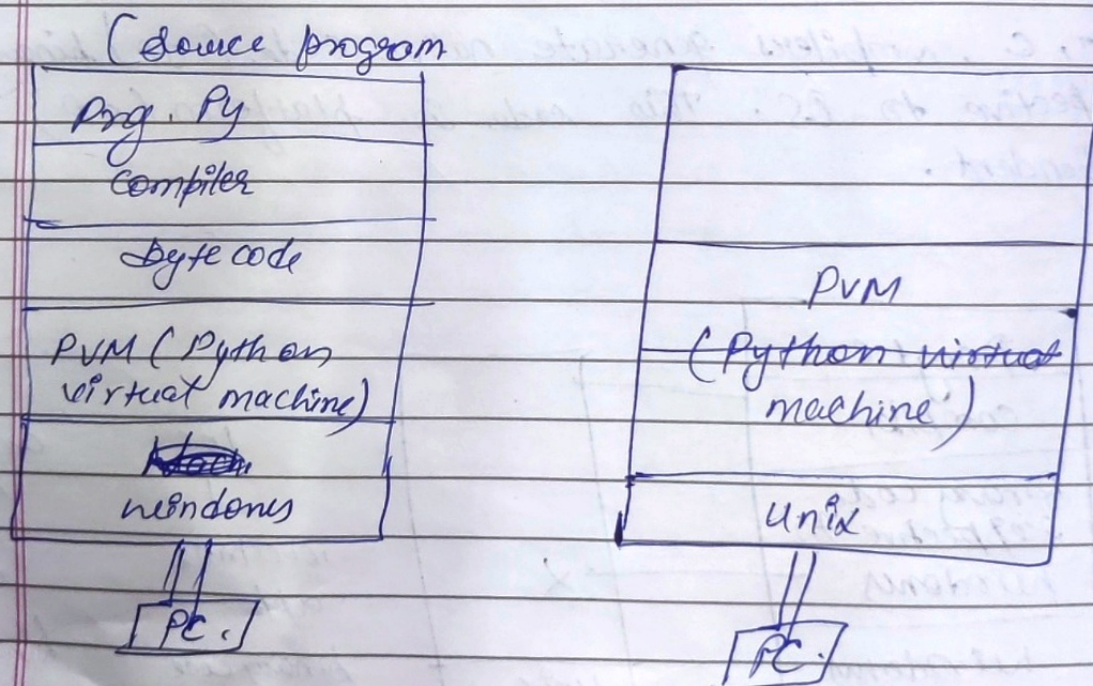
space
data.
(RAM/MM)

Problem with platform dependent languages.

1. Need to develop same applⁿ for every operating system
2. Increases development costs.

Platform Independent language.

→ In platform independent lang. development environment & executor environment may not be same.



Q What is byte code?

→ Compiler code of Python source program is called byte code.

→ Byte code is Python Virtual machine code (PVM)

→ BC is platform independent code.

→ BC is not 0's & 1's. Byte code collection of memory. mnemonics -

What is PVM?

→ PVM stands for Python Virtual Machine. It is a software provided by python.

→ JVM having translator called Interpreter, which translate Byte code in executable machine binary code.

→ Data representation in python is same for all operating systems.

⇒ Advantage of platform Independent lang. we write once run anywhere. or compile once & run anywhere.

V Dynamic:-

Programming lang. are two types:-

1. Statically typed prog. lang.

2. Dynamically

* C, C++, Java, C#, .net are called statically typed programming lang.

* In statically prog. (lang), variables are created with data type (OR) variables are bind with one data type - (OR) variables declaration is required.

→ Python is a dynamically typed programming lang.,
in python there is no variable declaration. Variables
in python not bind with one data type. its type is
changes based on value assigned.