

Lecture # 1 - Introduction

RTSA

EMBEDDED SYSTEMS — a dedicated computing system designed for specific functions within a larger system. Often with **REAL-TIME** constraints.

OBJECTIVES OF THE COURSE:

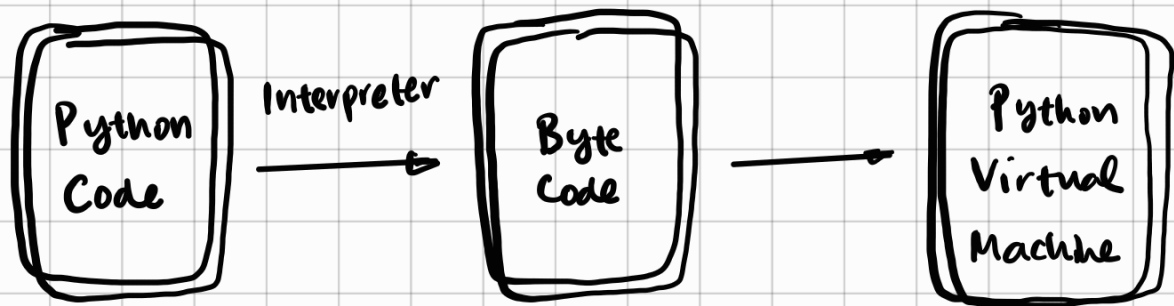
- ① To know the basics of Python.
- ② To gain a good understanding of operating systems and basics of OS programming.
- ③ To study methodologies to build real-time applications.

RESOURCES:

- Python
- Virtualbox
- Eclipse CDT

Python Introduction

PYTHON is a programming language



A high-level programming language and treats everything as an object

DATATYPES — a set of presented values. $3 + 4j$

- Primitives : integers, floats, complex numbers, booleans, strings

VARIABLES & VALUES

- Variables must start with any letter or the "_"
- Can contain digits and "_"
- Values contain datatype

DYNAMIC BINDING

- A variable name is an identifier of an object

OBJECT is a specific value enveloped in an identity.

~
Even two cars are completely identical, they
3 remain two separate cars. ~

Use operator **is** to test two objects have the same properties.

METHODS are functions that can be invoked on (from) an object. It is an instruction for an object to do something (?)