

Python programming notes by Harry

What is Programming?

Just like we use Hindi or English to communicate with each other, we use a programming language like Python to communicate with the computer.

Programming is a way to instruct the computer to perform various tasks.

What is Python?

Python is a simple and easy to understand language which feels like reading simple english. This Pseudo Code nature of python makes it easy to learn and understandable by beginners.

Features of Python

Easy to understand = Less development time

Free and open source

High level language

Portable → Works on Linux / Windows / Mac.

+ Fun to work with

Installation

Python can be easily installed from python.org. When you click on the download button, python can be installed right after you complete the setup by executing the file for your platform.

Just install
it like a game!



Chapter 1 : Modules, Comments & pip

Lets write our very first python program.
Create a file called hello.py and paste the below code in it

`print("Hello World")` → print is a function (More later)

Execute this file (.py file) by typing `python hello.py` and you will see Hello World printed on the screen.

Modules

A module is a file containing code written by somebody else (usually) which can be imported and used in our programs

Pip

Pip is the package manager for python
You can use pip to install a module on your system

→ `pip install flask` installs flask module.

Types of modules

There are two types of modules in Python

- 1> Built in modules → Pre installed in python
- 2> External modules → Need to install using pip.

Some examples of built in modules are os, abc, etc.
Some examples of external modules are tensorflow, flask etc.

Using Python as a Calculator

We can use python as a calculator by typing "python" + ↵ on the terminal

↳ This opens REPL
or Read Evaluate Print loop

Comments

Comments are used to write something which the programmer does not want to execute.

↳ Can be used to mark author name, date etc.

Types of Comments

There are two types of comments in Python

1. Single line comments → Written using #
2. Multi line comments → Written using ''' comment '''

Chapter 1 - Practice Set

- 1 Write a program to print Twinkle twinkle little star poem in python.
- 2 Use REPL and print the table of 5 using it
- 3 Install an external module and use it to perform an operation of your interest
- 4 Write a python program to print the contents of a directory using OS module. Search online for the function which does that.
- 5 Label the program written in Problem 4 with comments.