Python

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Introduction

Reference: edureka!
HI, it is a great time to learn python programming. Before we began, let's talk about our agenda for today. We will give you a guided way of becoming a python developer.

1. Comments
2. Variable
3. Operators
4. Data types
5. Loop
6. Libraries
7. File Handling and Functions
8. Web developing and Web Scraping

Introduction by Mosh

Python is an interpreted language. An interpreter basically a program that converts the Human code to machine code. Python is implemented by C. We download default implementation of python from python.org. Default implementation of python is called CPython. We can use Java codes in python through Jython.

Comment

Python comment is oneline comment mode and this is written adding a before hash tag.
e.g. : #This is a python comment.

Variable

Let's continue this series on PYTHON.
Variables are a special container that stores value. In python, "Variable is Variable". So no need to specify primary stage declaration of type of a variable. That's why, Python called, dynamically typed programming language.

Value Assignment

Syntax: *variable_name = value*
Equal sign (=) is used to assign values to the variable.

Value changing

First we assign 2 to the variable x and then assign 9 to the x. So, present value of x is 9. $x = 2$
$x9$
Now, $x = 9$.
If we want to access output of previous operation, use underscore (_). This means output of previous operation.
e.g. : $10 + x$
$= 19$
$y = 2$
$\_ + y$
$= 21$

String Variable

String concatenation in Python is same as C++. Use + sign to concatenate.
Declaring string variable:
Syntax: variable_name='Name'
e.g. : platform = 'YouTube'

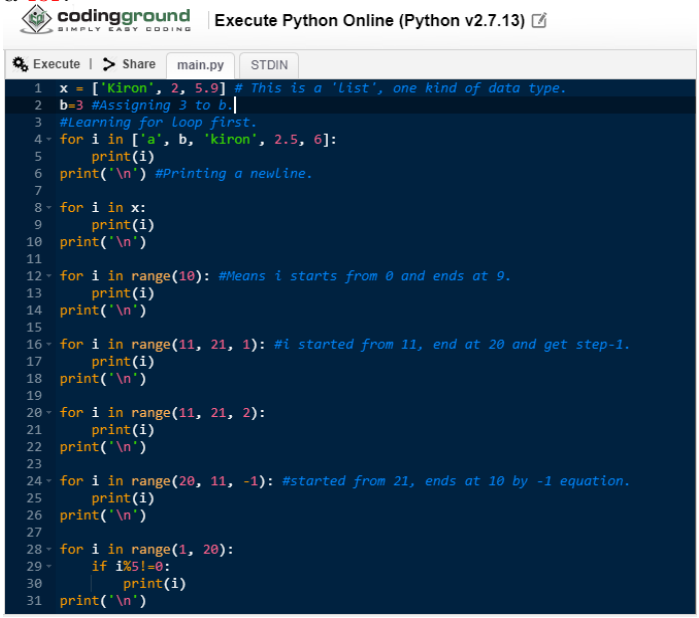
IN: platform[0]
OP: 'Y'
Normally in computer, counting always starts with 0.
IN: platform[1:4]
OP: ouT
That means, first one is starting index, second-one is before ending index.
Let's use len() function for outcome the length of the string variable.
IN: len(platform)
OP: 7
It returns an integer, size of platform.

Fourth tutorial over.

Loop

For Loop

Now we will talk about for loop.
We can write if inside a for. If we have if inside a for, then we have for inside a for.



List is a great kind of data type in Python. Here 'x' is a list variable. We will discuss about it later.

Functions

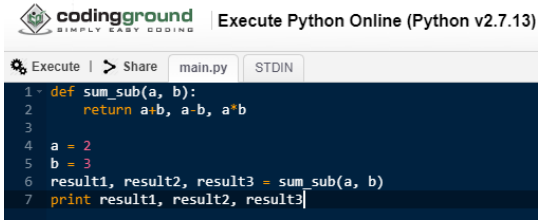
In python, user-defined functions are starts with "def" keyword.

```
1  def fun_name():
2          print("Kiron")
3
4  fun_name() #Calling the function.
```

Output: Kiron

Multiple return value

This is how we return multiple values from a python "def"



Output: 5, -1, 6

PIP

PIP: Python Installer Package

Check version: `pip --version`

List installed packages: `pip list`

Update: browse the directory where python is installed then run the command, `python -m pip install --upgrade pip`

Install a package: `pip install package_name`

Uninstall a package: `pip uninstall package_name`

Show: information about a package briefly, `py -m pip show package_name`

Show: information about a package descriptively, `py -m pip show --verbose package_name`

Documentation here.