

## **Course Content:**

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## **INTRODUCTION:**

python versions:

2.x

3.x

differences internally- language changes, library inclusions.

start with 2.x

know differences between 2.x n 3.x

Flavours of Python:

flavours are those widely used for specific requirements.

CPython- developed with C programming and now known as python

Jython

IronPython

PyPy

StacklessPython

Brython

RUbyPython

NumPy

SciPy

Matplotlib

PyLab

Environment setup:

Step 1:

Download software from <https://www.python.org/downloads/>

step2: Install and follow the steps to install in the default location

step3: Open a new command prompt and try command `c:\>python -V(caps V)` and ensure you see the version of your installation

step4: If you get error, most likely the python path will not be included in Environment variable

step5: open properties of MyComputer--> Advanced System Settings-> Advances Tab->Environment Variables-> System Variable Section, edit path Variable and append python installed path

Step6: Close all windows by choosing OK button

### **INSTALLATION:**

1. Goto python.org

2. Download python v2.X

3. For windows it will install under C:\python2x

4. Goto command prompt

5. create a folder to store all your python programs

```
mkdir pythonprograms
```

6. check the version of the python

```
python -V(caps V)
```

if we get an error saying python is not recognised then python environment is not setup.

Now goto installation path of the python which is c:\python2x and give the same command

```
python -V
```

Now you will be able to see the version.

## 7. Command Line Syntax

```
<command> [-options] <filename/programname> [<arguments>]
```

->command is the executing utility

->options are used to tweak/customize the output

->filename/programname is a file that contains the necessary program instructions

->arguments are the necessary values required for the program provided in hand before executions

Anything given in angle paranthesis is mandatory and square paranthesis is optional

Now, see the below command

```
python -v
```

## 8. Now we need to set the environment.

we can do in two types

a) Environment Variable-- permanent setup

b) Session Variable-- Temporary setup

```
path=%path%;c:/python2x;
```

this creates a session variable

then check python -V--> it displays the version of python installed.

if we give 'python' then it will go to python prompt and if we want to exit the type:

```
exit
```

```
ctrl+Z(windows)
```

```
ctrl+D(unix type)
```

once we give exit then cmd prompt will close.

## 9. Now again open CMD and then type python -v, then this throws an error as we declared session variable earlier.

So we need to give permanent variable for python to execute.

type 'path' to see the declared variables

Now create environment variable:

MyComputer->properties-> advanced system properties-> advanced-> environment variables->systemvariables->path

edit path variables--? add python path(c:\python27)

relaunch the CMD and issue commands and it will work.