

**TRAINER'S
INTRODUCTION
TOC
PARTICIPANT'S
INTRODUCTION**

About Me

Oracle certified Corporate
Trainer, Developer,
YouTuber[TechGatha]

Conducted 70+ training sessions on Java track, Web UI and Android with close to 1000+ participants from 20 corporates with average of 97% success results



Shalini Mittal

CERTIFICATIONS

- › CDAC
- › OCJP
- › AA certified RPA Trainer

TRAINING

- › Expert facilitator and corporate trainer with 10+ years of experience in training, content development, facilitating organizational development workshops , development and consultation.

EXPERIENCE

- › 10+ years of total experience as Corporate Trainer for Java track, Web UI , Android Python, MEAN STACK, ANGULAR, MICROSERVICES, DataBase

ROLE

- › Technical Trainer for various IT companies like Liberty Mutual,DBS,JPMC, LNT, Tech Mahindra, Accenture, CapGemini , BNP Paribas etc.
- › Jury member for various state level Project Competitions.
- › Guest Speaker at various engineering colleges
- › Consultant

Hosted many webinars for android app development and invited as Guest Speaker at various engineering and BSC colleges for sharing insights on future of Android and Career Aspects.

WHAT WE WILL COVER TODAY?

INTRODUCTION

WHAT IS PYTHON

PYTHON FEATURES

PYTHON SETUP

PYTHON IDE

A SIMPLE PROGRAM IN PYTHON

PYTHON HISTORY

• BRIEF HISTORY OF PYTHON :

- INVENTED BY GUIDO VAN ROSSUM (CWI,AMSTERDAM,1991)
- NAMED AFTER “MONTY PYTHON’S FLYING CIRCUS “ 1969-1974
- NOW OWNED BY THE PYTHON SOFTWARE FOUNDATION (PSF)
- DERIVED FROM ABC, MODULA-3, LISP AND “C” LANGUAGES



Guido Van Rossum

PYTHON USERS

- Google
- ILM
- Astra Zeneca
- SMHI
- YouTube
- Instagram
- Spotify
- Amazon
- SurveyMonkey
- Facebook

SO PYTHON FEATURES ARE...?

- Scripting language
- Interpreted ,Interactive
- Elegant Syntax and dynamic typing
- Rapid Application Development
- Object Oriented
- Portable
- Powerful
- Cross platform
- Easy to Learn and Use





HOW TO START WITH PYTHON...

- Python install
 - <https://www.python.org/downloads/>
- Set the PATH environment variable
 - On Power Shell –
 - [Environment]::SetEnvironment Variable("Path", "\$env:Path;C:\Python34", "User")
 - Then restart powershell. If needed restart the PC
 - Or directly go to Control Panel\All Control Panel Items\System
 - Set the PATH environment variable

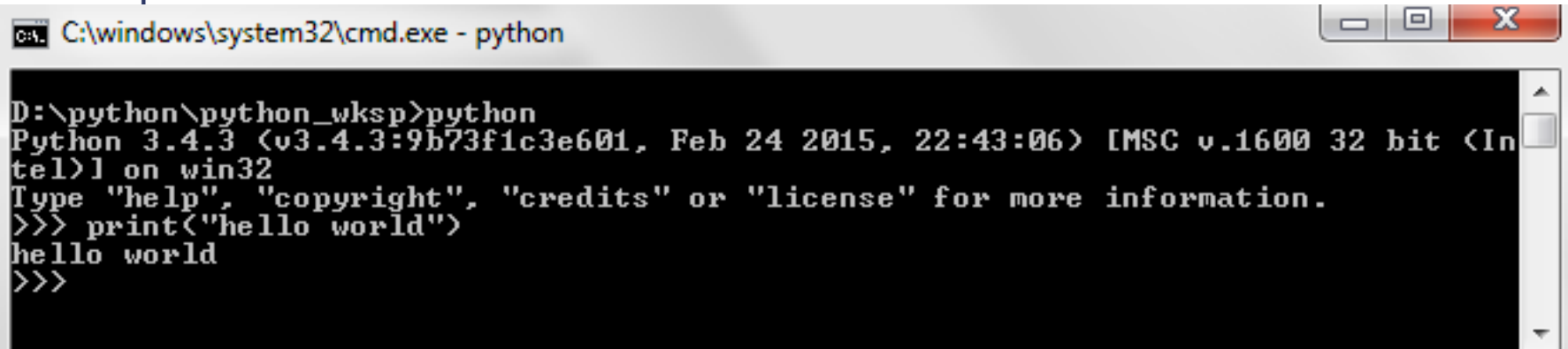


HEY YOU NEED AN IDE

- Install PyCharm IDE
 - <https://www.jetbrains.com/pycharm/download/#section=windows/>
- Install PyCharm
- Python interpreter => different for different OS
- Python code [python language] and the OS

FEW THINGS TO KNOW BEFORE WE BEGIN 😊

- Python programming can be done using a shell like Power Shell or command Prompt



```
C:\windows\system32\cmd.exe - python

D:\python\python_wksp>python
Python 3.4.3 (v3.4.3:9b73f1c3e601, Feb 24 2015, 22:43:06) [MSC v.1600 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> print("hello world")
hello world
>>>
```

- The various IDE's are also available for Python Programming
 - Eclipse
 - PyCharm
 - Boa Constructot
 - PythonWin
 - IDLE
 - etc

A SIMPLE HELLO WORLD

- Writing a program in python is as simple as this :
 - `print ("hello World") #python 3`
- Either you type this on a shell
- Or code in a source file using Notepad or any IDE
- Save your file with the extension .py
 - Eg: Hello.py
- On Command prompt : type
 - `python Hello.py`

PRINT() FUNCTION

The print() function

- `print("Hello world", "I am here!")`



Function

DO NOT FORGET THE
ROUND PARENTHESIS

YOU CAN SPECIFY MULTIPLE THINGS TO
BE PRINTED SEPERATED WITH COMMAS.

WHAT DOES PRINT FUNCTION
DO?

PRINTS THE STUFF THAT YOU
SPECIFY IN ROUND BRACKETS
TO THE CONSOLE/SHELL

PYTHON CALCULATOR

- `17 / 3` #classic division returns float
- `17 // 3.0` # explicit floor division discards the fractional part
- `17 % 3` # the % operator returns the remainder of the division
- `5 * 3 + 2` # result * divisor + remainder
- `5 ** 2` # 5 squared

LETS TAKE THE INPUT

Going ahead with user interaction.

Type the following:

```
>>>name=input("Please enter your name")
```

The name entered by user is taken as input
and stored in variable name

Please enter your nameArchana

Text in RED is user input

```
>>>name
```

Archana

`name` holds the name entered by user. Typing in the variable on shell
prompt displays the contents of the variable

```
>>>print(name)
```

Archana

You can print the value of variable by just giving the variable name in the
parenthesis of print.

NO QUOTES PLEASE FOR VARIABLES

INPUT()

The input() function

- `input("What is your name?")`



Function

DO NOT FORGET THE
ROUND PARENTHESIS

INSIDE THE ROUND PARENTHESIS IS
QUESTION TO THE USER.
IT IS A HINT TO THE USER ABOUT THE
INPUT TO BE ENTERED

WHAT DOES INPUT FUNCTION DO?
TAKES USER INPUT FROM THE CONSOLE
INPUT CAN BE WORDS, SENTENCES OR
NUMBERS

PROBLEM STATEMENT

- Write a program to take user's name as input and print as follows:
Welcome <user entered name>
- Example Output:

>>> Please Enter your name Shalini

Welcome Shalini



Desired Ouptut

PROBLEM STATEMENT SOLUTION

```
name = input("Enter your name")  
print("Welcome", name)
```


EXERCISE

- Print the following on console:
 1. Python is easy
 2. You can do it
 3. Let's do it
 4. She said, "Let's dance"
- Take age as input and print the following line on the console.
- You are <age entered by user> years old.

EXERCISE SOLUTION

- Print the following on console:

1. Python is easy
2. You can do it
3. Let's do it
4. She said, "Let's dance"

```
print('1. Python is easy')
```

```
print('2. You can do it')
```

```
print("3. Let's do it")
```

```
print('4. She said, "Let\'s dance"')
```

- Take age as input and print the following line on the console.
- You are <age entered by user> years old.

```
age = input('enter your age')  
print('You are',age,'years old')
```

ASSIGNMENT

- Print the following output using print function

```

~^^~
 |[#]|
~^^+--+~
 |[#]| |[#]|
~^^+-----+~
 |           |
 |   [ # ]   |   [ # ]   |
 |           |   |   |   |
 +-----+===+-----+
=====
  
```

ANY QUESTION ?





THANK YOU !