

PYTHON PROGRAMMING ESSENTIALS COURSE

Training of Trainers
Module 1



What is Python?

- Python is an interpreted, object-oriented, high-level programming language.
- It was created by Guido van Rossum and released in 1991.



Why Use Python?

- Easy to understand
- Can create the following
 - Web Applications
 - For Data Science and Data Visualization
 - Machine Learning
 - Script for Vulnerability Testing

Requirements

- Python 3.9.0 Interpreter
- Text Editor
 - Sublime
 - VS Code
- IDE (Optional)
 - Anaconda

- Google Classroom
- <https://paste.pics/>
- Anydesk (Optional)
- Greenshot (Optional)

How to execute Python code

- IDLE (IDLE is Python's Integrated Development and Learning Environment)
- Execute via Command Line (Windows)
- Creating a Python file

Indentation

- Python uses indentation to indicate code block.

```
If a == 1:  
    print("Yes")
```

Variables

- Variables are containers for storing data values.
- A variable is created the moment you first assign a value to it.

```
name = "John Doe"  
age = 40
```

Data Types

Type of data stored in a variable

- String
- Integer
- Float
- Boolean
- Bytes

Casting

- Converting one data type into another is known as casting.

```
x = int(10)
print("Number is " + str(x))
```

```
x = "10"
y = "10"
print(int(x) + int(y))
```

Day 1 Activity 1

1. Create 5 Variables (Firstname(string), Lastname (string), Hours worked (integer), Rate per hour (integer), Deduction (integer))

2. Assign appropriate value

3. Display the result:

Firstname: _____

Lastname: _____

Hours Worked: _____

Rate per hour: _____

Deduction: _____

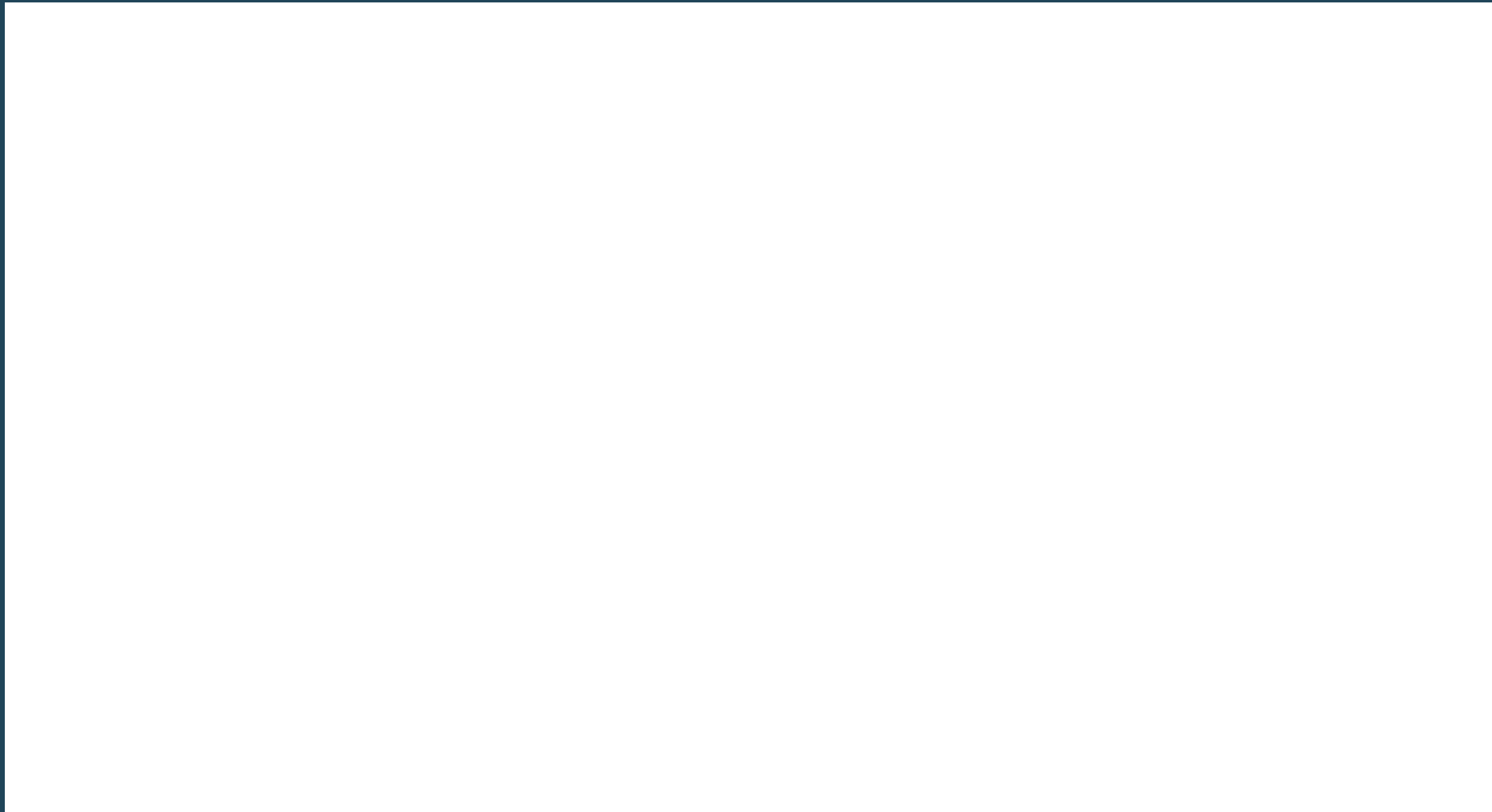
4. Screenshot the code and use the filename:

lastname_firstname_day1_activity1.png/jpeg

Input() function

- Accepts user's input

```
name = input("Enter Full Name: ")  
email = input("Enter Email: ")  
print("Name: " + name)  
print("Name: " + email)
```



Day 1 Activity 2

1. Create 6 Variables using input() function (Firstname(string), Lastname (string), Hours worked (integer), Rate per hour (integer), Deduction (integer), Salary(float))
2. Assign appropriate value
3. Salary is Hours worked multiplied by rate per hour
4. Display the result:

Firstname: _____

Lastname: _____

Hours Worked: _____

Rate per hour: _____

Deduction: _____

Salary: _____

5. Screenshot the code and use the filename:
lastname_firstname_day1_activity2.png/jpeg

THANK YOU!
