

# Python3 Scratch To Pro

## Instructors:

### Hitesh Choudhary:

I like to make videos related to code and tech in my free time. I also lead a few tech teams in startups, help in hiring talent for companies. I am also on a part time traveller, with 31 countries checked off so far!

## Curriculum:

### Introduction and installation of python

- Introduction to python course
- Python Installation
- Pycharm Installation on Windows
- Installation of python on MAC
- Installing Pycharm in MAC
- Using VSCode for python- optional

### First interaction with python basics

- Indents and comments
- take input from user and challenge
- input challenge solution
- getting started with variables in python
- numbers and strings basics in python
- Lists and tuples basics in python

- Dictionary in python

## **Operations in Python**

- Arithmetic and comparison operators in python
- Logical operations in python
- Membership and identity operations in python

## **Conditionals and loops**

- Introduction to conditionals
- Design a rating system in python
- While - Getting started with loops in python
- First step to read documentation
- For loop in python
- Break keyword in python loops
- continue and pass keywords in python

## **Detail analysis of data types**

- Randomness in python
- Using math library in python
- String are powerful in python
- Detail talk about lists in python
- Tuples and dictionary talks in python

## **Functions Files and Exceptions**

- getting started with functions in python

- Multiple arguments in python
- lambda in python
- design custom modules in python
- Find the day assignment in python
- Main method and file handling in python
- Exception handling

### **Python challenges for fun**

- Prime number and challenges
- range of prime numbers
- finding factorials
- Get matrix input and print it

### **Object Oriented programming in python**

- Introduction to class
- objects and constructor in python
- Getters and setters in python
- Inheritance from Samsung to iphone
- Method overriding in python

### **Database TODO App**

- Read sqlite3 documentation first
- Database helper in sqlite3 part 1
- databse helper file part 2
- Debugging and finishing the app

### **Advance side of python**

- Iterator and generators in python
- Maps and sets in python
- All and any functions in python
- Collections and deque

### **Handling API in Python**

- Requests and JSON handling in python
- Get a unique user every time - Project