

## Python Questions by Topics & Difficulty

### 1. Python Basics

Have you worked on python...?  
What are data types in python?  
Python data types  
What is dynamic typing in python?  
How do you take user input in python?  
Write any python definition you are aware of  
What is negative indexing in python?  
What is slicing and index in python?  
break, continue, pause in python  
Write a python script to reverse a string  
Python program on lists  
Difference between list and tuple (in python)  
Tuple in python  
List vs tuple with practical example  
Difference between tuple and dictionary in python

### 2. Python Operators & Control Flow

Write a python code to identify even number and add them accordingly  
Write a python code to print only the even numbers from the given range as the inputs  
Is valid parenthesis coding (Python)?  
Write a python code to check if the string is palindrome or not  
Write a code in python to check whether the number is palindrome or not

### 3. Functions, Modules & Built-ins

What is the use of modules in python?  
Modules of python  
What are built-in functions in python?  
Write python program for fibonacci series  
Python program to get the live time and compare the time  
Python program to remove negative number from nested lists

Write a python code to print fibonacci series [user needs to provide the value]

Write python code to find biggest and second biggest

Write a python code to find LCM

Python coding questions by using recursive function, generators

#### **4. Collections & Comprehensions**

List comprehension and lambda function in python

Lambda function with example

Python code to get things in order, remove duplicates, iterables

Create a function in python for input aabbccddd output a2b3c2d3

#### **5. File & Directory Operations**

Write a python script to check each item in directory is a file or directory

Write a python script to read a file and print alternate lines

command to delete a file in python

#### **6. Object-Oriented Programming & Advanced Concepts**

What is the init command in python?

Explain duck typing in python

Decorators with example

What are the python function decorators

Decorators and its advantage (python)

Difference between return and yield (python)

Shallow copy and deep copy in python

#### **7. Real-Life Scripting & Scenarios**

Write a python script to list which have duplicate elements and also to get unique elements and explain.

Write a python script to swap 2 numbers without using the third number

Write python code to print max of product of 3 numbers in a given list

Write a python script to split strings, capitalize the starting letter of each word, join without space

Python program to check the status codes of a url

Write a python script to validate password (uppercase, lowercase, special char, length 8)

Write a python code to split strings, capitalize the starting letter of each word and then join the strings without space

Given a list of integers, get the max number and subtract it from all elements (python)

## **8. Automation, Schedulers & Error Handling**

Write a python program to run periodically every 5 min

Exception handling in python

How do you manage environment variables in python

## **9. Scripting for Deployment, Web, APIs, and Docker**

Write a simple Docker file for python application and explain

Create a base image of python with generic dependencies (docker/python question)

Python program to automate deployment (pulling code, docker, deployment)

Python flask

Write python code for API calls, file reading, error handling, etc.

Write example python code for API calls, error handling, file reading, list

comprehensions, object-oriented concepts, working with pandas/numpy, etc.

## **10. Cloud Integration, DevOps & System Automation**

How is python useful for AWS?

How do you connect AWS API using python, what are the steps you follow?

Python program to fetch logs from remote server

Python program to monitor disk space in multiple servers & send alarm when the threshold is breached

## **11. Environment, CLI, & Professional Use**

How do you create/activate a python virtual environment?

How to accept command line arguments in python

Which automation tool have you used: python/shell/both?

Have you written any python automation code?

Can you write python scripts for automation?

Have you written python scripts for automation? Give scenarios.

Where do you maintain the python scripts?

What are some of the scripts that you have used for automation?

What are packages you have used in python?

Which script have you created using python and Bash?

What type of automation tasks done using python?

How well are you experienced with python programming?

Write python scenario-based questions

## **12. Challenging & Advanced Scenarios**

What is the most challenging python automation you have done?

Explain sub process model in python