Interview Questions for Python

- Q.1. What are the key features of Python?
- Q.2. Differentiate between lists and tuples.
- Q.3. Explain the ternary operator in Python.
- Q.4. What are negative indices?
- Q.5. Is Python case-sensitive?
- Q.6. How long can an identifier be in Python?
- Q.7. How would you convert a string into lowercase?
- Q.8. What is the pass statement in Python?
- Q.9. Explain help() and dir() functions in Python.
- Q.10. How do you get a list of all the keys in a dictionary?
- Q.11. What is slicing?
- Q.12. How would you declare a comment in Python?
- Q.13. How will you check if all characters in a string are alphanumeric?
- Q.14. How will you capitalize the first letter of a string?
- Q.15. We know Python is all the rage these days. But to be truly accepting of a great technology, you must know its pitfalls as well. Would you like to talk about this?
- Q.16. With Python, how do you find out which directory you are currently in?
- Q.17. How do you insert an object at a given index in Python?
- Q.18. And how do you reverse a list?
- Q.19. What is the Python interpreter prompt?
- Q.20. How does a function return values?
- Q.21. How would you define a block in Python?

- Q.22. Why do we need break and continue in Python?
- Q.23. Will the do-while loop work if you don't end it with a semicolon?
- Q.24. In one line, show us how you'll get the max alphabetical character from a string.
- Q.25. What is Python good for?
- Q.26. Can you name ten built-in functions in Python and explain each in brief?
- Q.27. What will the following code output?
- Q.28. How will you convert a list into a string?
- Q.29. How will you remove a duplicate element from a list?
- Q.30. Can you explain the life cycle of a thread?
- Q.31. What is a dictionary in Python?
- Q.32. Explain the //, %, and ** operators in Python.
- Q.33. What do you know about relational operators in Python.
- Q.34. What are assignment operators in Python?
- Q.35. Explain logical operators in Python.
- Q.36. What are membership operators?
- Q.37. Explain identity operators in Python.
- Q.38. Finally, tell us about bitwise operators in Python.
- Q.39. What data types does Python support?
- Q.40. What is a docstring?
- Q.41. How would you convert a string into an int in Python?
- Q.42. How do you take input in Python?
- Q.43. What is a function?
- Q.44. What is recursion?
- Q.45. What does the function zip() do?

- Q.46. How do you calculate the length of a string?
- Q.47. Explain Python List Comprehension.
- Q.48. How do you get all values from a Python dictionary?
- Q.49. What if you want to toggle case for a Python string?
- Q.50. Write code to print only upto the letter t.
- Q.51. Write code to print everything in the string except the spaces.
- Q.52. Now, print this string five times in a row.
- Q.53. What is the purpose of bytes() in Python?
- Q.54. What is a control flow statement?
- Q.55. Create a new list to convert the following list of number strings to a list of numbers.
- Q.56. Given the first and last names of all employees in your firm, what data type will you use to store it?
- Q.57. How would you work with numbers other than those in the decimal number system?
- Q.58. What does the following code output?
- Q.59. How many arguments can the range() function take?
- Q.60. What is PEP 8?
- Q.61. How is Python different from Java?
- Q.62. What is the best code you can write to swap two numbers?
- Q.63. How can you declare multiple assignments in one statement?
- Q.64. If you are ever stuck in an infinite loop, how will you break out of it?
- Q.65. How do we execute Python?
- Q.66. Explain Python's parameter-passing mechanism.
- Q.67. What is the with statement in Python?
- Q.68. How is a .pyc file different from a .py file?
- Q.69. What makes Python object-oriented?

- Q.70. How many types of objects does Python support?
- Q.71 Why do you want to work for this company?
- Q.72 Where do you see yourself in 10 years?
- Q.73 What will you bring to the table if we hire you?
- Q.74 Tell me about your best personal project. What challenges did you face, and how did it change the way you work?
- Q.75 Would you have a problem with menial tasks?
- Q.76 What makes you like Python over other languages?
- Q.77 What is the difference between AI, Data Science, ML, and DL
- Q.78 What is the difference between Supervised learning, Unsupervised learning and Reinforcement learning?
- Q.79 What is Linear Regression?
- Q. 80 How you can define Machine Learning?
- Q.81 What do you understand Labelled training dataset?
- Q.82 What are 2 most common supervised ML tasks you have performed so far?
- Q.83 What kind of Machine learning algorithm would you used to walk robot in various unknown area?
- Q.84 What kind of ML algo you can use to segment your user into multiple groups?
- Q.85 What type of learning algo realised on similarity measure to make a prediction?
- Q.86 What is an online learning system?
- Q.87 What is out of core learning?
- Q.88 Can you name couple of ml challenges that you have faced?

Q.89 Can you please give 1 example of hyperparameter tuning wrt some classification algorithm?