CREATIVE INSTITUTE DATA SCIENCE

Python Exam

1. **Give List comprehensions example?**
2. **What are the common built-in data types in Python?**
3. **What is slicing in Python?**
4. **What are Keywords in Python explain any 10?**
5. **What are Literals in Python and explain about different Literals**
6. **How to combine dataframes in pandas?**
7. What are python modules? Name some commonly used built-in modules in Python?
8. What is type conversion in Python?
9. Is indentation required in python?
10. What is the difference between Python Arrays and lists
11. What are functions in Python?
12. What is __init__?
13. What is a lambda function?
14. What is self in Python?
15. How does break, continue and pass work?
16. What does [::-1] do?
17. How can you randomize the items of a list in place in Python?
18. How can you generate random numbers in Python?
19. How do you write comments in python?
20. How will you capitalize the first letter of string?
21. How will you convert a string to all lowercase?
22. How to comment multiple lines in python?
23. What are docstrings in Python?
24. What is the purpose of 'is', 'not' and 'in' operators?
25. What is the purpose of 'is', 'not' and 'in' operators?
26. What is a dictionary in Python?
27. What does len() do?
28. How can files be deleted in Python?
29. How to add values to a python array?
30. How to remove values to a python array?
31. What are Python libraries? Name a few of them.
32. What is split used for?
33. How to create an empty class in Python?
34. Write a program in Python to execute the Bubble sort algorithm.
35. Write a program in Python to check if a number is prime.
36. Write a one-liner that will count the number of capital letters in a file. Your code should work even if the file is too big to fit in memory.
37. Write a sorting algorithm for a numerical dataset in Python.
    ```
    list = ["1", "4", "0", "6", "9"]
    ```
38. Suppose list1 is [2, 33, 222, 14, 25], What is list1[-1] ?
39. What is slicing in Python?
40. What is lambda in Python? Why is it used?
41. What is map() in python expalain with example