Weekly Group Workshops

B247

14.02.2024 Week-1

Interview Questions

1. Can you introduce yourself?
2. Could you tell us a bit about your past experience?
3. What are data types in python and how are they used?

Presentation topics

1. Why Python is essential for data analysis and data science?
2. How does it differ from other programming languages?

Assignment Description:

In this task, you are asked to investigate why Python is important for data analysis and data science and how it differs from other programming languages, and prepare your findings in a short presentation or report.

Expectations for Your Presentation:

You should include the following topics in your presentation:

- Python basics.
- Python development process
- Why Python is important for data analysis and data science
- Differences of Python from other programming languages
- Data analysis and data science applications with Python

Example Questions

1. *Write a program which will find all such numbers which are divisible by 7 but are not a multiple of 5, between 2000 and 3200 (both included).The numbers obtained should be printed in a comma-separated sequence on a single line.*

2. *Write a program which can compute the factorial of a given numbers.The results should be printed in a comma-separated sequence on a single line.Suppose the following input is supplied to the program: 8 Then, the output should be:40320*

3. *Write a program that accepts a comma separated sequence of words as input and prints the words in a comma-separated sequence after sorting them alphabetically.*

   Suppose the following input is supplied to the program:

   `without,hello,bag,world`

   Then, the output should be:

   `bag,hello,without,world`

4. *With a given integral number n, write a program to generate a dictionary that contains (i, i x i) such that is an integral number between 1 and n (both included). and then the program should print the dictionary.Suppose the following input is supplied to the program: 8*
   Then, the output should be:

   `{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64}`

Extra resources

Yazbel-Python Programming Language

Python Notes for Professionals book