

Interview Based Questions: Exercise questions

Section 1: Data and Its Importance

- 1. Define data and explain why it is considered the foundation of decision-making.
- 2. List and describe four ways data impacts modern businesses.

Section 2: The Evolution of Data

3. Explain the evolution of data storage and management from the 1980s to the 2020s.

Section 3: History and Features of Python

- 4. Write a brief history of Python, including its creation and key milestones.
- 5. List and explain five features of Python that make it suitable for beginners.

Section 3: High-Level vs. Low-Level Programming Languages

6. Contrast high-level and low-level programming languages with examples.

Section 5: Bits and Bytes

- 7. What is a bit, and how does it differ from a byte? Provide examples of their usage in computing.
- 8. Explain how data sizes are measured using bytes, kilobytes, and beyond.

Section 6: Interpreters vs. Compilers

- 9. Define interpreters and compilers. Give examples of languages that use each.
- 10. Discuss the advantages and disadvantages of using an interpreter over a compiler.

Section 8: Memory Management in Python

- 11. Explain the difference between heap memory and stack memory in Python.
- 12. How does Python's garbage collection process work?