Module-2

Q-2 How memory is managed in Python?

Ans: In Python, memory management is handled through:

1. **Automatic Memory Management**: Python uses a built-in garbage collector to automatically manage memory allocation and deallocation. It tracks objects and references to them, and it reclaims memory from objects that are no longer in use.

2. **Reference Counting**: Each object keeps a count of how many references point to it. When the reference count drops to zero, the memory for that object is freed.

3. **Garbage Collection**: In addition to reference counting, Python's garbage collector also deals with cyclic references (where objects reference each other in a cycle). It periodically identifies and cleans up these cycles to prevent memory leaks.

Q-4 What is the purpose continue statement in python?

Ans**:** The continue statement in Python is used to skip the remaining code inside a loop for the current iteration only.

Q-14 What are negative indexes and why are they used?

Ans: Negative indexing allows you to access elements of a sequence from the end, using negative numbers as indexes. This can be useful for getting the last few elements of a sequence, reversing a sequence, or performing other operations that require accessing elements from the end.