Memory Management Practice :

1. Write a Python program that creates an object and prints its reference count at different stages using the sys module.

2. Write a program to show that two variables pointing to the same immutable object share the same memory location using id().

3. Write a program that demonstrates how memory behavior differs when modifying a **list** versus a **tuple**.

4. Create a program that generates circular references between two objects and show how Python's garbage collector handles them using the gc module.

5. Write a program that keeps adding objects to a global list inside a function call and explain why memory usage keeps increasing.

6. Write a program to demonstrate how local variables are created and destroyed in memory when a function is called and returns.

7. Write a program that compares memory addresses when using assignment (=), copy.copy(), and copy.deepcopy() on a nested list.