

Singleton Pattern

① Eager Initialisation

Classname obj = new Classname();

② Classic

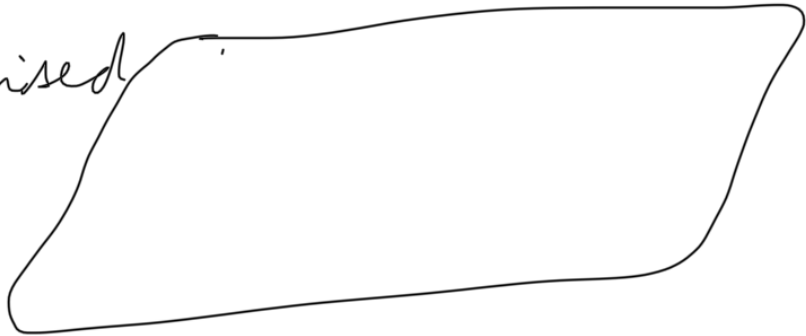
if (obj == null)
obj = new Singleton();

~~Thread
Safe~~

Not

③ Synchronised

Synchronised



④ Double Checked Locking

public static DBConnection getInstance();

①

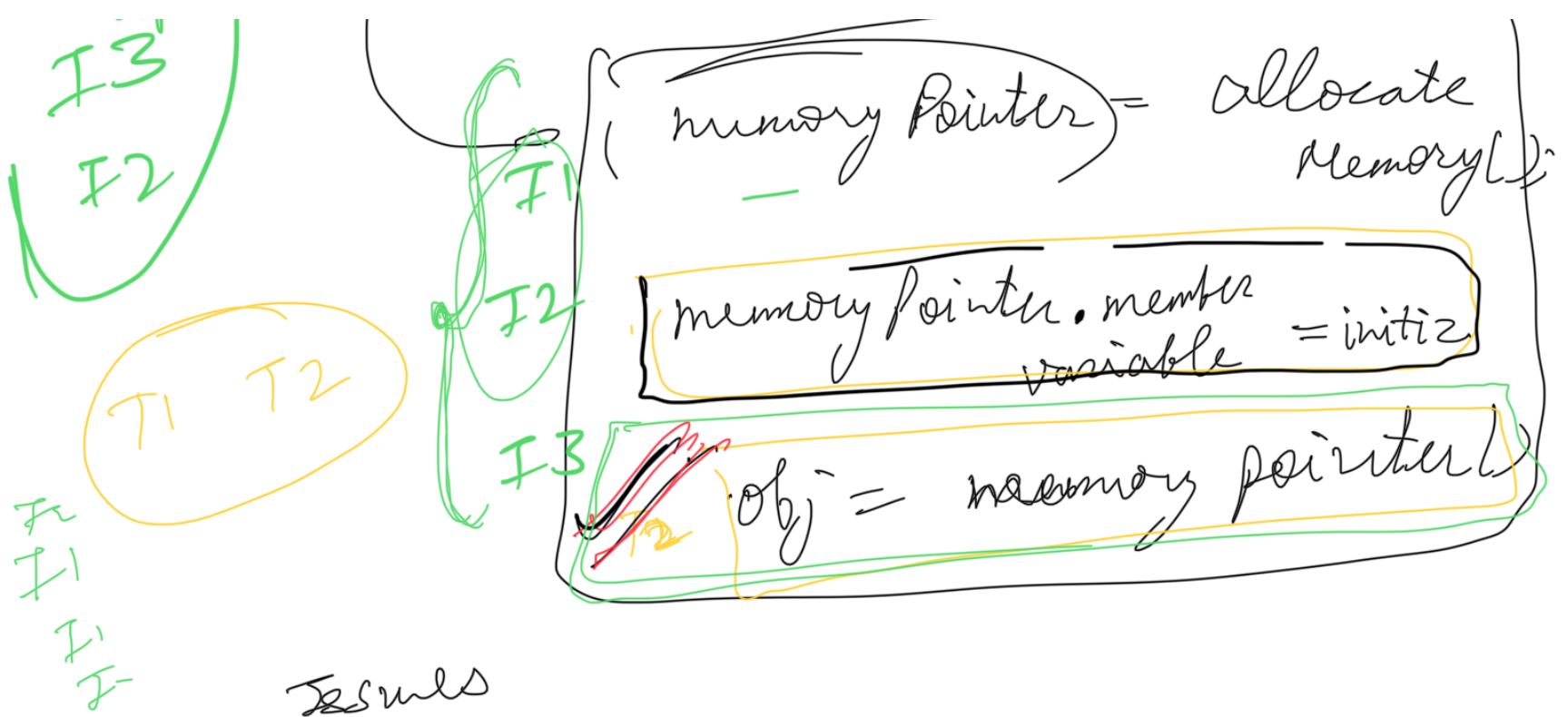
if (obj == null)

synchronised (DBConnection.class)

if (obj == null)

obj = new DBConnection();

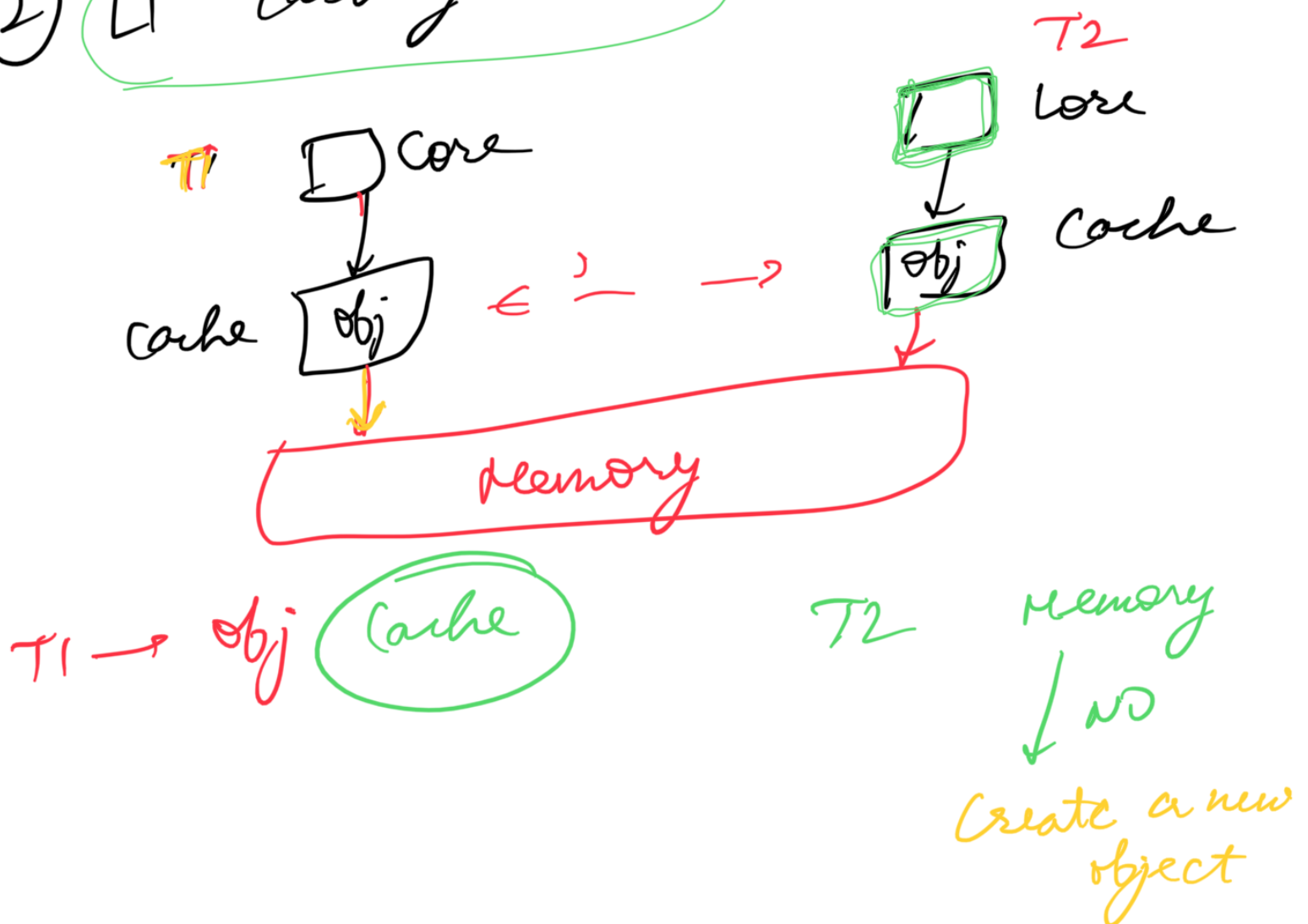
①
obj = null



Issues

① Reordering of instructions

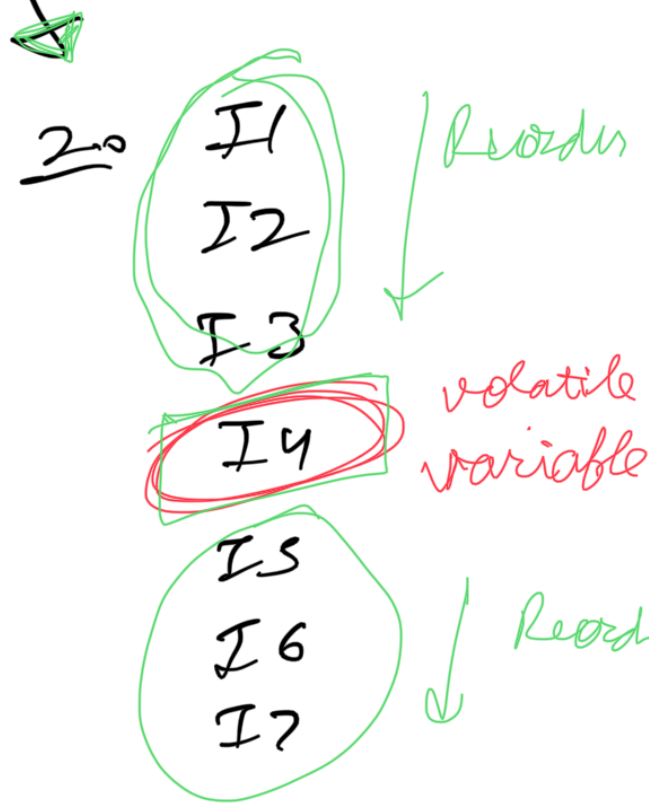
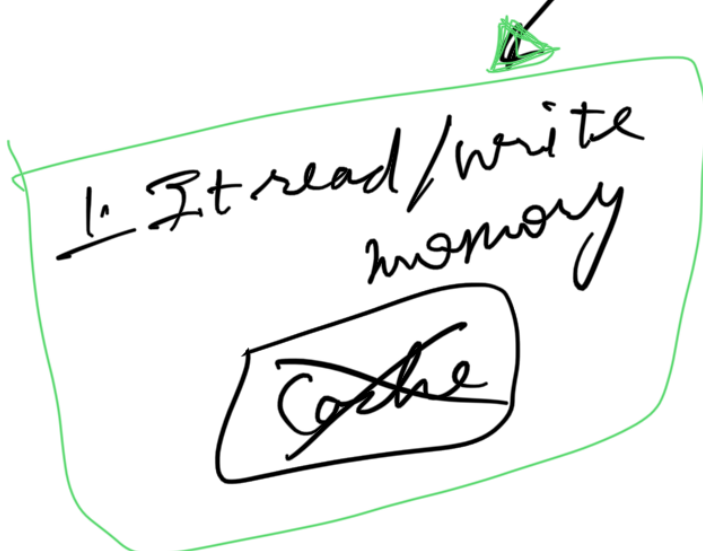
② L1 Caching Issue



Solution →

volatile

private static volatile singleton obj;



I2
I3
I1