Memory Management

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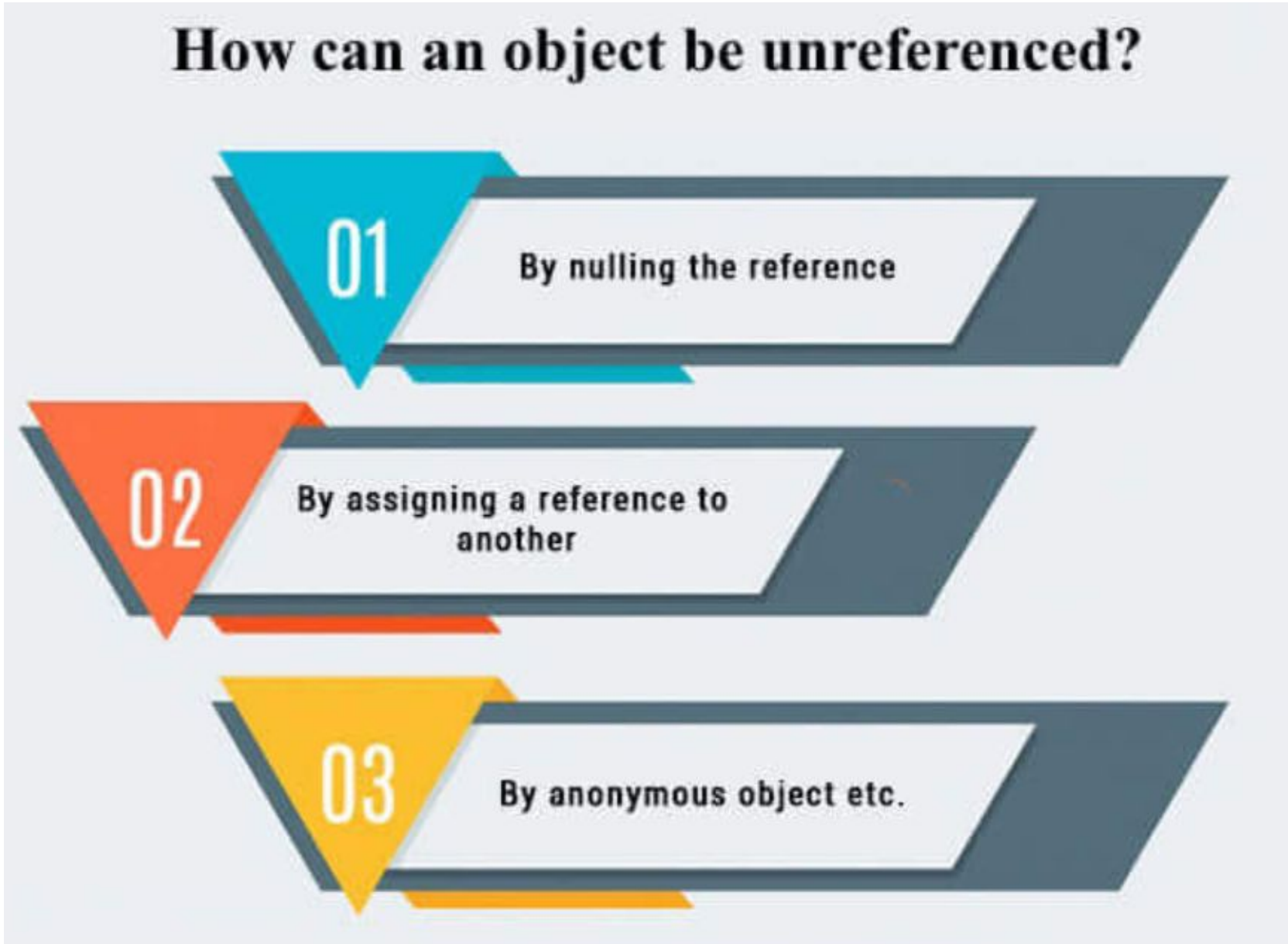
1. process of allocation and de-allocation of objects
2. Java does memory management automatically.
3. Java uses an automatic memory management system called a **garbage collector**.(garbage means unreferenced objects)

Enhancement in Garbage Collector

1. Lowest Priority Daemon Thread
2. Runs in the background when JVM starts
3. Collects all the unreferenced objects
4. Frees the space occupied by these objects
5. Call System.gc() method to “hint” the JVM to invoke the garbage collector


How can an object be unreferenced?
01
By nulling the reference
02
By assigning a reference to another
03
By anonymous object etc.

Finalize() method

1. finalize() method is invoked each time before the object is garbage collected. This method can be used to perform cleanup processing.
2. Syntax:

```
void finalize()
 {
        }
```

3. The gc() method is used to invoke the garbage collector to perform cleanup processing.

Example

```
public class Main{
 public void finalize()
 {
      System.out.println("object is garbage collected");
      }
 public static void main(String args[]){
  Main s1=new Main();
  Main s2=new Main();
  s1=null;
  s2=null;
  System.gc();
 }
}
```