

Exercise 3 (Solution)



- Identify the location where the object, initially referenced with **arg1**, is eligible for garbage collection.

```
public class MyClass {  
    public static void main(String[] args) {
```

```
A → String msg;  
B → String pre = "This program was called with ";  
C → String post = " as first argument.";   
D → String arg1 = new String((args.length > 0) ? "'" +  
    args[0] + "'" : "<no argument>");  
E → msg = arg1; arg1 = null; // (1)  
F → msg = pre + msg + post; // (2)  
    pre = null; // (3)  
    System.out.println(msg); msg = null; // (4)  
    post = null; // (5)  
    args = null; // (6)  
}  
}
```

Local uninitialised variable, so it does not have a default value.

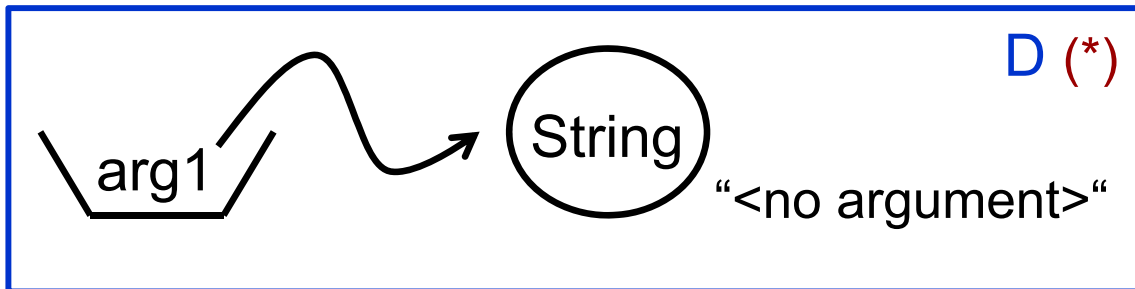
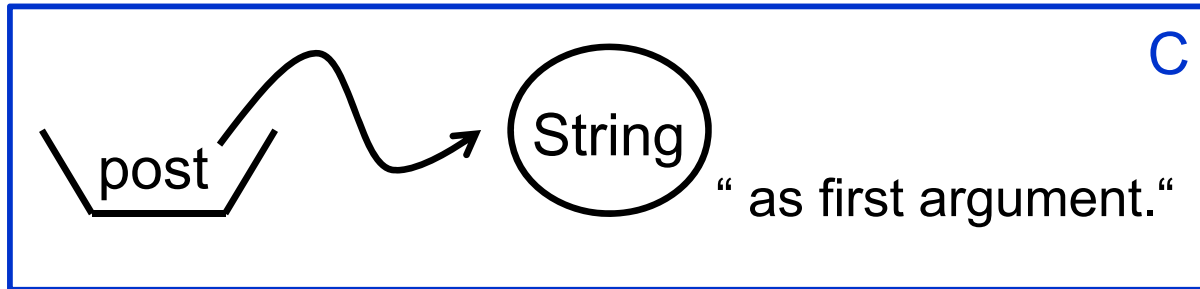
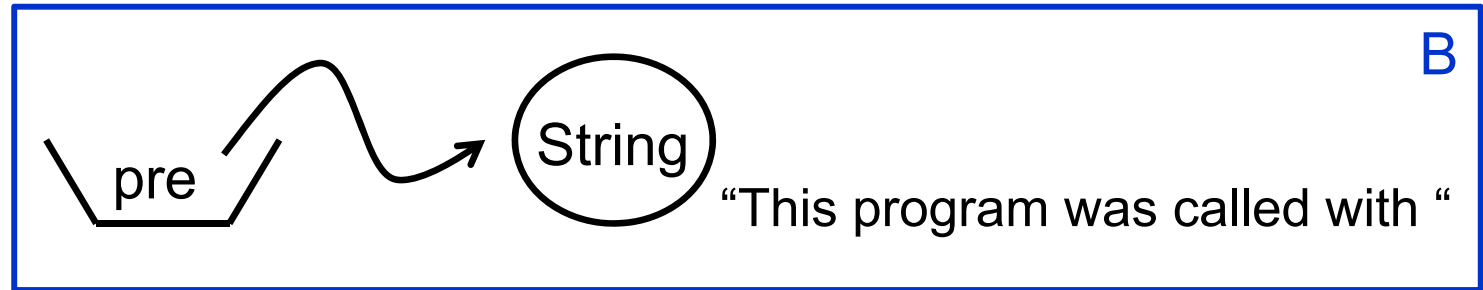
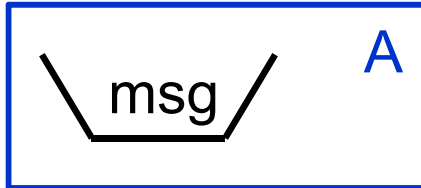
Summary:

After (2), there are no references to the **String** object initially referenced by **arg1**. That **String** object is now eligible for garbage collection.

Exercise 3 (Solution – cont.)



Steps in the code ...



(*) Assumes program is run without arguments on the command line.

Exercise 3 (Solution – cont.)



Steps in the code ...

