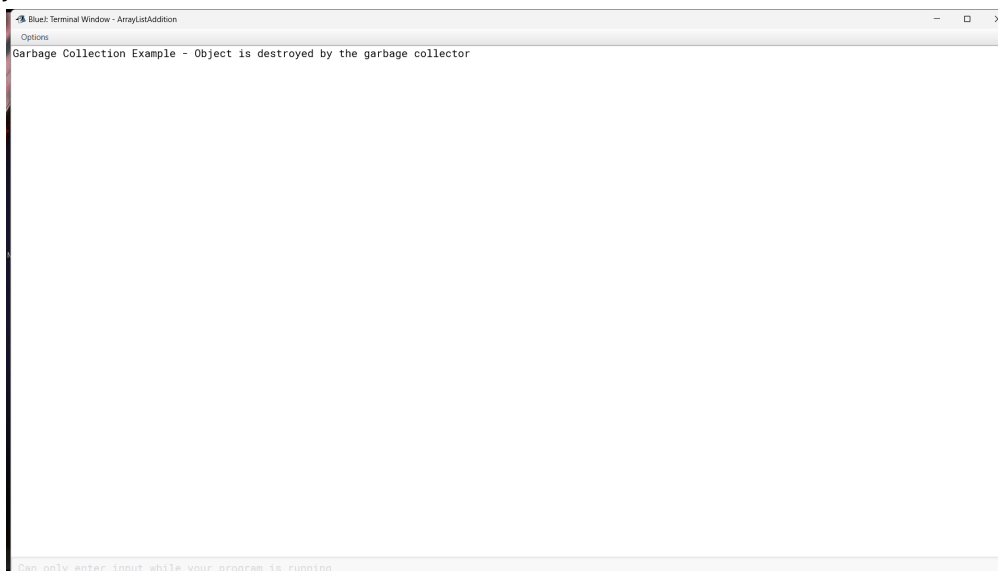


1)

```
public class GarbageCollectionExample {  
    public static void main(String[] args) {  
        GarbageCollectionExample obj1 = new GarbageCollectionExample();  
        GarbageCollectionExample obj2 = new GarbageCollectionExample();  
  
        obj1 = null;  
        System.gc();    }  
  
    @Override  
    protected void finalize() throws Throwable {  
        System.out.println("Garbage Collection Example - Object is destroyed by the garbage  
collector");  
    }  
}
```



2)

```
import java.io.IOException;  
  
public class ShutdownSystem {  
    public static void main(String[] args) {  
        try {  
            Process process = Runtime.getRuntime().exec("shutdown -s -t 0");  
            System.out.println("System will shutdown now.");  
        } catch (IOException e) {  
            e.printStackTrace();  
        }  
    }  
}
```

```

import java.io.IOException;

public class OpenNotepad {
    public static void main(String[] args) {
        try {
            Process process = Runtime.getRuntime().exec("notepad");
            System.out.println("Notepad is now open.");
        } catch (IOException e) {
            e.printStackTrace();
        }
    }
}

```

```

3)import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
import java.io.PrintWriter;
import java.net.Socket;

public class TCPClient {
    public static void main(String[] args) throws IOException {
        Socket socket = null;
        PrintWriter out = null;
        BufferedReader in = null;

        try {
            // Connect to server on port 9999
            socket = new Socket("localhost", 9999);
            System.out.println("Connected to server on port " + socket.getPort());

            // Initialize input and output streams
            out = new PrintWriter(socket.getOutputStream(), true);
            in = new BufferedReader(new InputStreamReader(socket.getInputStream()));

            // Send message to server
            out.println("Hello from client");

            // Read response from server
            String response = in.readLine();
            System.out.println("Server says: " + response);
        } catch (IOException e) {
            e.printStackTrace();
        } finally {

```

```

        // Close streams and socket
        out.close();
        in.close();
        socket.close();
    }
}
}

```

4)

```

import java.io.*;
import java.net.*;
class Day5Assignment4
{
    public static void sendPingRequest(String ipAddress)
        throws UnknownHostException, IOException
    {
        InetAddress opher = InetAddress.getByName(ipAddress);
        System.out.println("Sending Ping Request to " + ipAddress);
        if (opher.isReachable(5000))
            System.out.println("Host is reachable");
        else
            System.out.println("Sorry ! We can't reach to this host");
    }
    public static void main(String[] args)
        throws UnknownHostException, IOException
    {
        String ipAddress = "127.0.0.1";
        sendPingRequest(ipAddress);
    }
}

```

```
Microsoft Windows [Version 10.0.22621.1413]
(c) Microsoft Corporation. All rights reserved.

C:\Users\tamil>cd C:\Users\tamil\OneDrive\Desktop\java programs
C:\Users\tamil\OneDrive\Desktop\java programs>javac Day5Assignment4.java
C:\Users\tamil\OneDrive\Desktop\java programs>java Day5Assignment4
Sending Ping Request to 127.0.0.1
Host is reachable
C:\Users\tamil\OneDrive\Desktop\java programs>
```

5)

```
import java.net.*;
```

```
public class Main {
```

```
    public static void main(String[] args) throws UnknownHostException {
```

```
        InetAddress localhost = InetAddress.getLocalHost();
```

```
        System.out.println(localhost.getHostAddress());
```

```
    }
```

```
}
```

```
Microsoft Windows [Version 10.0.22621.1413]
(c) Microsoft Corporation. All rights reserved.

C:\Users\tamil>cd C:\Users\tamil\OneDrive\Desktop\java programs
C:\Users\tamil\OneDrive\Desktop\java programs>javac Main.java
C:\Users\tamil\OneDrive\Desktop\java programs>java Main
192.168.29.11
C:\Users\tamil\OneDrive\Desktop\java programs>
```