

5. Writing a program in Java to verify implementations of collections

ALGORITHM

Step 1: Start

Step 2: Create array list collection

Step 3: Add items using add()

Step 4: Create linked list collection

Step 5: Add items using add()

Step 6: Create stack collection

Step 7: Add items using push()

Step 8: Stop

SOURCE CODE

//implementation of collections

```
package assistedPracticeProject;
```

```
import java.util.*;
```

```
public class Practice_Project5
```

```
{
```

```
    public static void main(String args[])
```

```
    {
```

```
        //collection - array list
```

```
        ArrayList<String> list=new ArrayList<String>();
```

```
        System.out.println("\n---PROGRAMMING LANGUAGES---\n");
```

```
        //adding objects in array list
```

```
        list.add("C");
```

```
        list.add("JAVA");
```

```
        list.add("C++");
```

```
        list.add("Python");
```

```

list.add("C#");

//iterate through the list
Iterator pp1=list.iterator();
while(pp1.hasNext())
{
    System.out.println(pp1.next()); //displaying each list item
}

//collection - linked list
LinkedList<String> ll=new LinkedList<String>();
System.out.println("\n---OPERATING SYSTEM---\n");
ll.add("Linux");
ll.add("Windows");
ll.add("IOS");
ll.add("Android");
Iterator<String> pp2=ll.iterator();
while(pp2.hasNext())
{
    System.out.println(pp2.next());
}

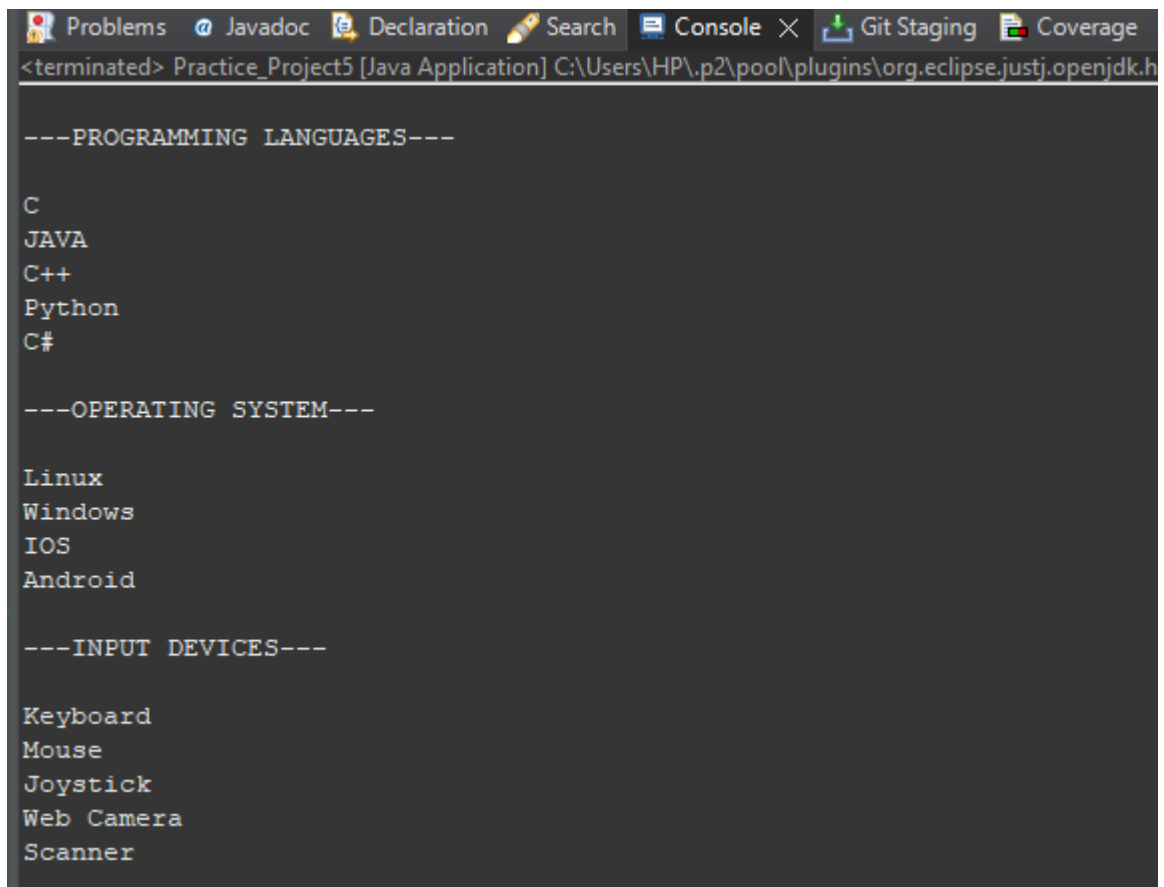
//iterate through stack

Stack<String> stack = new Stack<String>();
System.out.println("\n---INPUT DEVICES---\n");
stack.push("Keyboard");
stack.push("Mouse");
stack.push("Joystick");

```

```
        stack.push("Web Camera");  
        stack.push("Scanner");  
        Iterator<String> pp3=stack.iterator();  
        while(pp3.hasNext())  
        {  
            System.out.println(pp3.next());  
        }  
    }  
}
```

OUTPUT



```
---PROGRAMMING LANGUAGES---  
  
C  
JAVA  
C++  
Python  
C#  
  
---OPERATING SYSTEM---  
  
Linux  
Windows  
IOS  
Android  
  
---INPUT DEVICES---  
  
Keyboard  
Mouse  
Joystick  
Web Camera  
Scanner
```