

Screen shot of Jeliot paused during the pop off of stack.

The screenshot shows the Jeliot IDE with a Java program for a stack algorithm. The code is paused at the `pop` method. The right-hand side of the IDE displays a visual representation of the stack as a linked list of `StackNode` objects. The stack contains three nodes with values 2, 1, and 0. The `pop` method is currently executing, and the console shows the output: "Pushed on stack Value: 2", "Pop from Stack Value: 2", and "Pop from Stack Value: 1".

```
6      this.value = value;
9    }
10
11
12
13
14    public static void main(String[] args) {
15        StackNode link;
16
17        link = null;
18        link = push(link, 0);
19        System.out.println("Pushed on stack Value: " + link.value);
20
21        link = push(link, 1);
22        System.out.println("Pushed on stack Value: " + link.value);
23
24        link = push(link, 2);
25        System.out.println("Pushed on stack Value: " + link.value);
26
27        System.out.println("Pop from Stack Value: " + link.value);
28        link = pop(link);
29
30        System.out.println("Pop from Stack Value: " + link.value);
31        link = pop(link);
32
33        System.out.println("Pop from Stack Value: " + link.value);
34        link = pop(link);
35    }
36
37
38    public static StackNode push(StackNode node, int value) {
39        StackNode nnode;
40
41        if (node != null) {
42            nnode = new StackNode( value );
43            nnode.ptr = node;
44        } else {
45            nnode = new StackNode( value);
46            nnode.ptr = null;
47        }
48        return(nnode);
49    }
50
51    public static StackNode pop(StackNode node) {
52
53        if (node != null) {
54            return(node.ptr);
55        } else {
56            System.out.println("Nothing on the stack");
57            return(null);
58        }
59    }
60
61 }
```

Visual representation of the stack (linked list):

- Object of the class StackNode (ptr points to next node, int value: 2)
- Object of the class StackNode (ptr points to next node, int value: 1)
- Object of the class StackNode (ptr points to null, int value: 0)
- int length: 0
- EMPTY ARRAY

Console output:

```
Pushed on stack Value: 2
Pop from Stack Value: 2
Pop from Stack Value: 1
```