

# Environment.java

```

1 package other;
2
3 import java.util.HashMap;
4
5
6
7 public class Environment {
8
9     private Environment parent;
10
11     private HashMap<String, IValue> map;
12
13     public Environment(){
14         this.parent = null;
15         map = new HashMap<String, IValue>();
16     }
17
18     public Environment(Environment parent) {
19         this.parent = parent;
20         map = new HashMap<String, IValue>();
21     }
22
23     public Environment beginScope() {
24         Environment newEnv = new Environment(this);
25         return newEnv;
26     }
27
28     public void assoc(String key, IValue value) {
29         if(map.put(key, value)!=null)
30             throw new Error("Variable already declared");
31     }
32
33     public IValue find(String key) {
34         Object value = map.get(key);
35         if(value == null) {
36             if(this.parent == null) {
37                 throw new Error("Variable (" + key + ") not Declared");
38             }else {
39                 return parent.find(key);
40             }
41         }
42         return (IValue)value;
43     }
44
45     public Environment endScope() {
46         return parent;
47     }
48
49 }
50

```