

```
package decaf;

public class ScopeElement {
    private String name;
    private int type;
    private int line;
    private int[] ptypes = null;
    private int size = -1;

    // For a normal variable
    public ScopeElement(String name, int type, int line) {
        this.name = name;
        this.type = type;
        this.line = line;
    }

    // For an array variable
    public ScopeElement(String name, int type, int line, int size) {
        this.name = name;
        this.type = type;
        this.line = line;
        this.size = size;
        if (size <= 0)
            System.err.println("Error on line "+line+": Array \""+
                               name+"\" should have size greater than 0.");
    }

    // For method declaration
    public ScopeElement(String name, int type, int line, int[] ptypes) {
        this.name = name;
        this.type = type;
        this.line = line;

        if (ptypes == null || ptypes.length == 0)
            this.ptypes = null;
        else
        {
            int n = ptypes.length;
            this.ptypes = new int[n];
            for (int i = 0; i < n; i++)
                this.ptypes[i] = ptypes[i];
        }
    }

    public int getLine() {
        return line;
    }

    public int getType() {
        return type;
    }

    public int[] getTypes() {
        return ptypes;
    }

    public int getSize() {
```

```
        return size;  
    }  
}
```