AST

Abstract syntax tree (AST), or just syntax tree, is a tree representation of the abstract syntactic structure of source code written in a programming language.

Example of AST (#1)

- Given the following expression:

```
1 + 2
```

- The output AST would be:

```
+ BinaryExpression
 - type: +
 - left_value:
  LiteralExpr:
   value: 1
 - right_value:
  LiteralExpr:
   value: 2
```

- Given the following expression:

```
if (2 > 6) {
    var d  = 90
    console.log(d)
}
```

The output AST would be:

```
IfStatement
 - condition
  + BinaryExpression
   - type: >
   - left_value: 2
   - right_value: 6
 - body
  [
    - Assign
        - left: 'd';
        - right:
            LiteralExpr:
              - value: 90
    - MethodCall:
        - instanceName: console
        - methodName: log
```

Lab assignmnet

Follow "Cool Tour" to construct "Queens.cool" given it's AST. Basically reverse engineer the cool program from its AST.