A huge problem with this program was figuring out where the errors were. Part of this was because it was hard to tell if it was a code generator, or parser, or hw6 issue. I figured out this out just by reviewing lecture notes, or by seeing which instructions were being made by the generator. Doing vm.run(true) was very useful. I also found out I had a lexer error that hadn't shown up until this hw.

```
Static Error: program missing main function
● bpoblette@DESKTOP-FEL3C9E:~/hw7-bpoblette-1$ ./mypl examples/exec-arrays-structs.mypl
  should be 20: 20
  should be 10: 10
  should be 30: 30
  should be 5: 5
  should be 15: 15
○ bpoblette@DESKTOP-FEL3C9E:~/hw7-bpoblette-1$
```

```
● bpoblette@DESKTOP-FEL3C9E:~/hw7-bpoblette-1$ ./mypl examples/exec-built-ins.mypl
  Normal String
  String with        tab
  42
  3.141590
  7
  f
  o
  Enter a string: hello
  hello
● bpoblette@DESKTOP-FEL3C9E:~/hw7-bpoblette-1$
```

```
 Should be '-1': -1
 Should be true 3 < 4: true
 Should be true 3 <= 4: true
 Should be true 4 > 3: true
 Should be true 4 >= 3: true
 Should be true 4 == 4: true
 Should be true 4 != 3: true
 Should be true not 4 != 4: true
Double Tests:
 Should be '5.500000': 5.500000
 Should be '9.250000': 9.250000
 Should be '6.750000': 6.750000
 Should be '9.375000': 9.375000
 Should be '1.750000': 1.750000
 Should be '2.080000': 2.080000
 Should be '-3.400000': -3.400000
 Should be true 3.1 < 4.2: true
 Should be true 3.1 <= 4.2: true
 Should be true 4.2 > 3.1: true
 Should be true 4.2 >= 3.1: true
 Should be true 4.2 == 4.2: true
 Should be true 4.2 != 3.1: true
Bool Tests:
 Should be true (not false): true
 Should be true (true and true): true
 Should be true (not false and true): true
 Should be true ((not false) and true): true
 Should be true (not (true and false)): true
 Should be true (true or false): true
 Should be true (false or true): true
 Should be true (false or (not false)): true
 Should be true (not false or false): true
Char Tests:
 Should be true 'a' < 'b': true
 Should be true 'a' <= 'a': true
 Should be true 'd' > 'c': true
 Should be true 'b' >= 'a': true
 Should be true 'a' == 'a': true
 Should be true 'b' != 'a': true
bpoblette@DESKTOP-FEL3C9E:~/hw7-bpoblette-1$
```

```
bpoblette@DESKTOP-FEL3C9E:~/hw7-bpoblette-1$ ./mypl examples/exec-hello.mypl
  Hello World!
bpoblette@DESKTOP-FEL3C9E:~/hw7-bpoblette-1$ ./mypl examples/exec-linked-list.mypl
  [10, 20, 30, 40, 50]
bpoblette@DESKTOP-FEL3C9E:~/hw7-bpoblette-1$
```

```
bpoblette@DESKTOP-FEL3C9E:~/hw7-bpoblette-1$ ./mypl examples/exec-tree.mypl
  Tree Values: 1 2 5 7 10 12 13 14 15
  Tree Height: 5
bpoblette@DESKTOP-FEL3C9E:~/hw7-bpoblette-1$
```