

17-355/17-655/17-819: Program Analysis

In-Class Exercises

February 12, 2019

Andrew ID: _____

1. What is the right initial dataflow information for live variables analysis?

2. Draw the CFG, and apply interval analysis (at least a few iterations), for the program below. What happens?

```
1: x := 0
2: if x = y goto 5
3: x := x + 1
4: goto 2
5: y := 0
```

3. Do the same as question (2), using the widening operator, as discussed.