CS 2210 – Homework 3
Due: Monday, February 25, 2013 at the start of class

Please submit a typewritten document. I'd prefer you draw your DFA on the computer, but if this is a challenge, you may hand draw them neatly on the paper by hand.

1.) Construct the DFA of LR(0) items for the following grammar:

```
A → a B D

B → b C

C → D e | f

D → d
```

2.) Build the SLR parse table for the above grammar. Show the Follow sets you built to determine the reduce actions.

3.) Show an SLR parse for the input:

```
a b f d
```

Show the stack, input, and actions in an action table as was done in the slides.

4.) Identify the basic blocks in the following sequence of IR code and construct the Control Flow Graph:

```
      x := 0
L1:   a := x * 2
      b := a < 5
      iftrue b goto L2
      a := a + 2
L2:   c := a + x
      b := x < 10
      iftrue b goto L1
      return c
```