Homework assignment

CMSC 15300

Due: April 14, 2004

1. Give an algorithm to classify a directed graph as either: a tree, a DAG, or a general graph (*i.e.*,, one with cycles).
   Hint: start with depth-first search.

2. Consider the following code sequence:

```
a = 1;
b = a+1;
c = a+b;
d = c+b;
print (d+b);
```

   (a) Draw the interference graph for this code.

   (b) What is the minimum number of registers required for this graph?