CSI 465 Compiler Design
LAB 4: Decisions

Objectives:
a) *Understand how decision statements are coded into assembly language.*
b) *Understand the differences in programming various relational operators.*

1) Exercises:
    a) Type the following code in a program in Frances.

```
int x=3;

if(x < 7)

    x=1;

 else

    x=2;
```

   i)   Write the assembly code associated with each line next to the line.
   ii) Explain exactly what is occurring in this assembly code.
   iii) What changes in the code if you replace < with <= ?
       (1) > ?
       (2) >= ?
       (3) = = ?
       (4) != ?
   iv) What changes in the assembly code if you create a variable '*y*', set y=7; and then compare x to y rather than the value 7? Why do you suppose it is done this way?