Problem 22. (8 points):

This problem tests your understanding of how `for` loops in C relate to IA32 machine code
Consider the following IA32 assembly code for a procedure `foo()`:

```
foo:
        pushl %ebp
        movl %esp,%ebp
        movl 12(%ebp),%ecx
        xorl %eax,%eax
        movl 8(%ebp),%edx
        cmpl %ecx,%edx
        jle .L3
        .align 4
.L5:
        addl %edx,%eax
        decl %edx
        cmpl %ecx,%edx
        jg .L5
.L3:
        leave
        ret
```

Based on the assembly code above, fill in the blanks below in its corresponding C source code. (Note: you may only use symbolic variables x, y, i, and $result$, from the source code in your expressions below — do *not* use register names.)

```
int foo(int x, int y)
{
  int i, result=0;

  for (i=_____; _____; _____) {

      _____;

  }

  return result;
}
```