
CS 371
Assignment #2
If, While, What?

Due 9/23/08, in class

The goal of this assignment is to write an assembler program that reflects a compiler's output from several control structures. This will be done by writing an assembler program that finds primes. Your program should print the primes from 2 to 100. Use the following "algorithm."

```
procedure main
  local int i

  for i = 2 to 100
    if (prime(i))
      print i
    end if
  end for
end main

boolean function prime (int i)
  local boolean is_prime
  local int k

  is_prime = TRUE

  k = 2
  while (is_prime and k <= i/2)
    if i mod k == 0 then
      is_prime = FALSE
    else
      k = k + 1
    end if
  end while

  return(is_prime)
end prime
```

What to hand in

Send me an email with two attachments:

- 1) your well formatted program (Don't forget header comments), and
- 2) a jpeg (or similar) of a print screen showing the output.

Notes

Note the control structures for, while, and if-then and if-then-else