Assignment 1 (Programming)

Due at the end of the class meeting on Wednesday, Aug. 28th

1. For a given positive integer *n*, output the first *n* primes.
   E.g. *n*=3, output: 2,3,5;
   n=7, output: 2,3,5,7,11,13,17.

2. For a given integer *n*>1, list all primes not exceeding *n*.
   E.g. *n*=10, output: 2,3,5,7;
   n=16, output: 2,3,5,7,11,13.

3. For a given integer *n*>1, output its prime factorization. (Please follow the format strictly)
   E.g. *n*=8, output: 2^3;
   n=72, output: 2^3*3^2.
   (2^3 means 2^3)