## ESC101: fundamental of computing

Lecture 28 17 October, 208

In this lecture we continued discussion on Arrays. We gave description of the following programs.

1. Generating random number (see the file random\_example.java)

Those who are interested in the mathematics underlying generation of (pseudo) random numbers should visit the link http://en.wikipedia.org/wiki/Random\_number\_generator or go through the following famous book (available in central library) Knuth, D.E.: The Art of Computer Programming, volume 2: Seminumerical Algorithms. Addison-Wesley, Reading, MA, 3rd edition, 1997.

- 2. Filling the entries of an arrays with random numbers (see the file array\_random.java)
- 3. Selection sort: algorithm to sort an array by repeatedly selecting the smallest element.

  (see the file selection\_sort.java)
- 4. Generating random numbers less than a given number using **Sieve of Eratosthenes**. (see the file sieve.java).