**REGISTOR AND COUNTERS**

**Introduction To Verilog**

* A highly descriptive language.
* Used in designing hardware.
* **Procedural blocks:** Sequence of procedures.

**Verilog Data Types**

* **NETS**
  + Physical connections b/w structures.
  + Do not store values (except **“tireg”**).
  + Contains driver values which **changes** **continuously**.
  + **Net data types:** wire, tri, wor, trior, wand, triand, tri0, tri1, supply0, supply1, tireg.
  + Declared as **input**, driven by **output**.
* **Registers**
  + Stored in procedural blocks.
  + **Register data types:** reg, integer, time, real.
  + Reg is used for describing logic.
  + Reg is **x** at start of simulation by default.
  + Wire not connected to anything has value as **x**.

**Verilog Value Set**

* 0
* 1
* x – unknown value
* z – high impedance of tristate gate