

### DAY-85 #100DAYSRTL

# "System Verilog:- TestBench Components"

## "Transaction":-

#### It contains

- ✓ variables for all ports (DUT) except Global Signals
- ✓ modifiers for input ports
- ✓ Constrains for variables
- ✓ Methods→Printing Values, Copy

#### "Generator":-

- ✓ It performs Randomization for transaction method
- ✓ It Sends transactions to the driver
- ✓ It Sense event from Scoreboard and Driver

#### "Driver":-

- ✓ It Receives transactions from the generator
- ✓ It applies reset to DUT
- ✓ It applies transactions to DUT with an interface

#### "Monitor":-

- ✓ It Capture DUT response
- ✓ It Sends a response transaction to the scoreboard
- ✓ It also controls data to be sent for a specific operation

#### "Scoreboard":-

- ✓ It Receives transactions from the monitor
- ✓ Store transaction: array, Queue, Associative Array, etc
- ✓ Compare with expected result

### "Environment Class":-

- ✓ It holds all classes together
- ✓ It Schedules different process
- ✓ It connects Mailbox, Events

### "Transaction":-

- ✓ It has all the ports of DUT defined with logic
- ✓ It is dynamic in nature

