

## Lab 07: Using UVM Sequence and Understanding Virtual interface

**Objective:** To learn the generation of meaningful directed and random sequences.  
To learn setting and getting of virtual interface in UVM.

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### Task 1:

- Copy the following link  
<https://www.edaplayground.com/x/Xk86>
- Open base\_seq.sv. Make a new sequence class with name rand\_seq and extend from base\_seq.
- Generate a random sequence using `uvm\_do\_with macro in task body.
- Generate a directed sequence using `uvm\_do\_with macro in task body to drive a=5, b=10.
- Inside base\_test class start your rand sequence to see the results. (don't use repeat block and do all necessary steps to start rand\_seq)

### Task 2:

- In body task of your rand sequence comment the `uvm\_do\_with macros and use 5 methods to generate the random sequence.

### Step 3:

- Change the scope of the virtual interface setting in testbench.sv for environment class only.
- Get the virtual interface in environment class. Analyze the results.