Module: SV for Verification
Section: Threads & Interprocess Communication **Task:** Events

Task 1 - EDA Link

Events

➢ **Code:**
The code has some syntactical errors, after resolving the issues, the final code will look like as follows:

```
// Author: Noman Rafiq
// Dated: Sep 09, 2024

program automatic events;
event e1, e2;
task trigger(event local_event, input time wait_time);
  #wait_time;
  ->local_event;
endtask

initial begin
  fork
    trigger(e1, 10ns);
    begin
      wait(e1.triggered);
      $display("%0t: e1 triggered", $time);
    end
  join
end

initial begin
  fork
    trigger(e2, 20ns);
    begin
      wait(e2.triggered);
      $display("%0t: e2 triggered", $time);
    end
  join
end

endprogram
```

➢ **Expected Output:**
This SystemVerilog code demonstrates the use of events and concurrent execution using the **fork-join** construct. Two events, **e1** and **e2**, are triggered after delays of 10ns and 20ns respectively, using the **trigger** task. The code waits for each event to be triggered before printing a message indicating the time at which the event occurred. The expected output would be that at 10ns, the

message for **e1** is printed, and at 20ns, the message for **e2** is printed, showing concurrent event handling and synchronization.

➢ **Actual Output:**