```
1. module tb;
2.
3.
4. integer i = 0;
5.
6. reg clk = 0, sys_rst = 0;
7. reg [15:0] din = 0;
8. wire [15:0] dout;
9.
10.
11. top dut(clk, sys_rst, din, dout);
12.
13. always #5 clk = \simclk;
14.
15. initial begin
16. sys_rst = 1'b1;
17. repeat(5) @(posedge clk);
18. sys_rst = 1'b0;
19. #800;
20. $stop;
21. end
22.
23. endmodule
```