```
`timescale 1ns/1ps

module tb;

  localparam TB_N = 8;

  reg             tb_clk;
  reg             tb_rst;
  reg             tb_enable;
  reg             tb_load;
  reg  [TB_N-1:0] tb_prox_cuenta;

  wire [TB_N-1:0] tb_cuenta;


  initial begin


    $dumpfile("dump.vcd");
        $dumpvars;

    test();

  end


        contador #(
    .N        (TB_N)
  ) dut (
    .clk         (tb_clk),
    .rst         (tb_rst),
    .enable      (tb_enable),
    .load        (tb_load),
    .prox_cuenta (tb_prox_cuenta),
    .cuenta      (tb_cuenta)
  );


  task test;

    integer i;
    begin
          tb_clk = 1'b0;
    tb_rst = 1'b0;
    tb_enable = 1'b0;
    tb_load = 1'b0;

    tb_prox_cuenta = 8'h45;


    #20;
    tb_rst = 1'b1;
    #20;
    tb_rst = 1'b0;
    #100;

    for (i=0;i<1000;i=i+1) begin
      tb_clk = ~tb_clk;
      #10;
    end

    tb_enable = 1'b1;

    for (i=0;i<20;i=i+1) begin
      tb_clk = ~tb_clk;
      #10;
    end

    for (i=0;i<20;i=i+1) begin
```

```
          tb_clk = ~tb_clk;
          #10;
        end

        tb_load = 1'b1;

        for (i=0;i<20;i=i+1) begin
          tb_clk = ~tb_clk;
          #10;
        end

        tb_load = 1'b0;

        for (i=0;i<20;i=i+1) begin
          tb_clk = ~tb_clk;
          #10;
        end

      end

    endtask

  endmodule
```