class generator;

mailbox gen2drv;

transaction trans;

covergroup cg1;

coverpoint trans.sel{

bins b0 = {1'b0};

bins b1 = {1'b1};

}

coverpoint trans.coin {

bins b0 = {0};

bins b1 = {5};

bins b5 = {10};

}

endgroup

function new(mailbox gen2drv);

this.gen2drv = gen2drv;

cg1 = new();

endfunction

task put\_msg();

repeat (20)

begin

trans = new();

trans.c2.constraint\_mode(0);

trans.c3.constraint\_mode(0);

assert(trans.randomize());

cg1.sample();

gen2drv.put(trans);

$display("Coverage Percentage: %.2f%%", cg1.get\_inst\_coverage());

end

endtask

endclass