Writing Assertions for Arbiter

request[7:0]
grant[7:0]

$sampled → display
$past
$rose
$fell
$countones →

|-> overlapping
|=> non-overlapping

```
assert property(@(posedge clk) $countones(grant) ==1 );
                                                  or
                                                  <=1
generate
  for(i=0;i<8;i=i+1): LABEL1
8 assertions
    assert property(@(posedge clk) req[i] |=> ##[1:4] grant[i]);
```

```
always @(posedge clk)
    if (x) begin
        y<= ...
    -> assert property (x&y)
    end
```

Week 4

SV basics
- interfaces
- clking
- Assertions

Random constraints ←

Functional coverage

Midterm Week 6

Verif. Methodology (basic)

UVM (advanced)