⑤

⇒ Blocking statements,

These ~~Stat~~ are the statements which are executed in the order they are specified in a procedure block.

In simple words, if a blocking instruction is executing it blocks the execution of all statements which follows.

ex.

```
integer a,b,c;
initial
    begin
        a=1; b=2; c=3;
        a= b+c;
        b= a+5;
        c= a-b;
    end
```

" = " ⇒ Sign

initially, a=1, b=2, c=3,

a = b+c ⇒ ③.

b = a+5 ⇒ 3+5 ⇒ ⑧.

c = a-b ⇒ 3-8 ⇒ ⑤.

So, as the statements are executed the corresponding values are also updated.

Mainly used for combinational circuits.
As they gets executed in specific order.

Non-Blocking statements,

Non-blocking statements literally do not block the execution of the next statements.

Non blocking statements result in simultaneous or Parallel statement execution.

Suitable for sequential logic ckts.

Used whenever concurrent procedural assignment is needed.

ex.

```
integer a,b,c ;
    initial begin
        a=1; b=2 ; c=3 ;

        a<= #5 b+c ;
        b<= #5 a+5 ;
        c<= #5 a-b ;
```

"<="

initially, a=1, b=2, c=3,

a = b+c ⇒ (5).
b = a+5 = 1+5 ⇒ (6).
c = a-b = 1-2 ⇒ (-1).

Here values (initial) are simultaneously assigned to every equation so, the values are not changed after each execution.