

35th Day

Threads

Code1

```
module test();
```

```
    initial
```

```
        begin
```

```
            #10;
```

```
            $display("starting of fork %0t", $time);
```

```
        fork
```

```
            begin
```

```
                #10;
```

```
                $display("1st display statement %0t", $time);
```

```
            end
```

```
        begin
```

```
            #20;
```

```
            $display("2nd display statement %0t", $time);
```

```
        end
```

```
    begin
```

```
        #30;
```

```
        $display("3rd display statement %0t", $time);
```

```
        #10;
```

```
        $display("4th display statement %0t", $time);
```

```
    end
```

join

\$display("exit is at time t=%0t",\$time);

end

endmodule

Simulation

Contains Synopsys proprietary information.

Compiler version U-2023.03-SP2_Full64; Runtime version U-2023.03-SP2_Full64; Apr 26 10:13 2025

starting of fork 10

1st display statement 20

2nd display statement 30

3rd display statement 40

4th display statement 50

exit is at time t=50

V C S S i m u l a t i o n R e p o r t

Time: 50 ns

CPU Time: 0.370 seconds; Data structure size: 0.0Mb

Sat Apr 26 10:13:13 2025

Done

Code 2

module test();

initial

begin

#10;

\$display("starting of fork %0t",\$time);

fork

begin

#10;

\$display("1st display statement %0t",\$time);

end

```
begin
    #20;
    $display("2nd display statement %0t",$time);
end

begin
    #30;
    $display("3rd display statement %0t",$time);
    #10;
    $display("4th display statement %0t",$time);
end

join_any
$display("exit is at time t=%0t",$time);

end
endmodule
```

Simulation

Compiler version U-2023.03-SP2_Full64; Runtime version U-2023.03-SP2_Full64; Apr 26 10:20 2025

starting of fork 10

1st display statement 20

exit is at time t=20

2nd display statement 30

3rd display statement 40

4th display statement 50

V C S S i m u l a t i o n R e p o r t

Time: 50 ns

CPU Time: 0.390 seconds; Data structure size: 0.0Mb

Sat Apr 26 10:20:46 2025

Code3

```
module test();
```

```
initial
```

```
begin
```

```
    #10;
```

```
    $display("starting of fork %0t", $time);
```

```
fork
```

```
begin
```

```
    #10;
```

```
    $display("1st display statement %0t", $time);
```

```
end
```

```
begin
```

```
    #20;
```

```
    $display("2nd display statement %0t", $time);
```

```
end
```

```
begin
```

```
    #30;
```

```
    $display("3rd display statement %0t", $time);
```

```
    #10;
```

```
    $display("4th display statement %0t", $time);
```

```
end
```

join_none

\$display("exit is at time t=%0t",\$time);

end

endmodule

Simulation

Compiler version U-2023.03-SP2_Full164; Runtime version U-2023.03-SP2_Full164; Apr 26 10:26 2025

starting of fork 10

exit is at time t=10

1st display statement 20

2nd display statement 30

3rd display statement 40

4th display statement 50

V C S S i m u l a t i o n R e p o r t

Time: 50 ns

CPU Time: 0.320 seconds; Data structure size: 0.0Mb

Sat Apr 26 10:26:00 2025
