

34th Day

Types Of Constraints-Part2

Distribution Constraints

```
class msd;  
    rand int a;  
    constraint c1 {a dist{7:=3,6:=12,13:=6};}  
endclass  
  
module tb;  
    initial  
        begin  
            msd m=new();  
            repeat(15)  
                begin  
                    m.randomize();  
                    $display("randomized values of a=%0d",m.a);  
                end  
            end  
        end  
endmodule
```

Simulation

Contains Synopsys proprietary information.

Compiler version U-2023.03-SP2_Full64; Runtime version U-2023.03-SP2_Full64; Apr 24 08:34 2025

randomized values of a=7

randomized values of a=6

randomized values of a=13

randomized values of a=6

randomized values of a=13

randomized values of a=6

randomized values of a=13

randomized values of a=6

randomized values of a=6

randomized values of a=7

randomized values of a=13

randomized values of a=13

randomized values of a=7

randomized values of a=7

randomized values of a=6

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

Time: 0 ns

Inline constraint

```
class msd;
```

```
    rand int a,b,c;
```

```
    constraint c1{c==a+b;}
```

```
endclass
```

```
module tb;
```

```
    msd m=new;
```

```
    initial
```

```
        begin
```

```
m.randomize with {a==5;b==10;};  
$display("a=%0d,b=%0d c=%0d",m.a,m.b,m.c);  
end
```

```
endmodule
```

Simulation

Chronologic VCS simulator copyright 1991-2023

Contains Synopsys proprietary information.

Compiler version U-2023.03-SP2_Full64; Runtime version U-2023.03-SP2_Full64; Apr 24 09:22 2025

a=5,b=10 c=15

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

Time: 0 ns

CPU Time: 0.420 seconds; Data structure size: 0.0Mb

Thu Apr 24 09:22:29 2025
