39th Day

Constraints

0101010101(array format)

```
class msd;
 rand int a[];

 constraint c1{a.size==10;}
 constraint c2
 {
  foreach (a[i])

    if(i%2==0)
     a[i]==0;
     else
      a[i]==1;

 }

 function void post_randomize();
  $display("randomized values of a=%p",a);
 endfunction

endclass

 module tb;
  initial
   begin
```

```
    msd m=new();

    m.randomize();

  end

endmodule
```

Simulation

Code 2 (0101010101)

```
//0101010101

class msd;

 rand int a[];

  constraint c1{a.size==10;}

 constraint c2

 {

  foreach (a[i])


    if(i%2==0)

     a[i]==0;

     else

      a[i]==1;


 }
```

```systemverilog
  function void post_randomize();

    $display();

    $write("randomized pattern of a is ");
     foreach(a[i])
      begin
       $write("%0d ",a[i]);
      end
    $display();
endfunction
endclass

module tb;
  initial
    begin
      msd m=new();
      m.randomize();
    end
endmodule
```

Simulation

Code3

```
//1234554321
class msd;
  rand int a[];
   constraint c1{a.size==10;}
   constraint c2
 {
   foreach(a[i])
    if(i<5)
     a[i]==i+1;
   else if(i<10)
    a[i]==10-i;
 }

  function void post_randomize();
   $display();
   $write("randomized value of a is ");
   foreach(a[i])
    begin
     $write("%0d ",a[i]);
    end
   $display();
  endfunction
endclass

module tb;
 initial
   begin
    msd m=new();
```

```
    m.randomize();

  end

endmodule
```

<u>Simulation</u>

```
Compiler version U-2023.03-SP2_Full64; Runtime version U-2023.03-SP2_Full64;  May  2 10:54 2025

randomized value of a is 1 2 3 4 5 5 4 3 2 1
          V C S   S i m u l a t i o n   R e p o r t
Time: 0 ns
CPU Time:      0.410 seconds;      Data structure size:   0.0Mb
Fri May  2 10:54:40 2025
Done
```