25th Day

Class

Code1

```
class msd;
  int a,b,c;


  function void display();
   a=10; b=20;
   c=a+b;
   $display("\n value of c is %0d \n",c);
  endfunction
endclass


module top;
 initial
  begin
   msd m=new();
   m.display();
  end
endmodule
```

Simulation

```
Compiler version U-2023.03-SP2_Full64; Runtime version U-2023.03-SP2_Full64;  Apr 12 11:43 2025

 value of c is 30

        V C S   S i m u l a t i o n   R e p o r t
Time: 0 ns
CPU Time:      0.520 seconds;      Data structure size:    0.0Mb
```

Code2

```systemverilog
class msd;

 int a;
 int b;
 int c;

 function void sum();
   a=10; b=20;
   c=a+b;
 endfunction

 function void display();
   $display("\na=%0d b=%0d c=%0d\n",a,b,c);
 endfunction

endclass
```

```
module top;
  initial
    begin
      msd m=new();
      m.sum();
      m.display();
    end
endmodule
```

Simulation

```
a=10 b=20 c=30

        V C S   S i m u l a t i o n   R e p o r t
Time: 0 ns
CPU Time:      0.510 seconds;      Data structure size:   0.0Mb
Sat Apr 12 11:51:55 2025
Done
```

Code3

```
class msd;

  int a;
  int b;
  int c;

  function int sum();
    a=10; b=20;
    return a+b;
```

```systemverilog
    endfunction

  function void display();
    $display("\na=%0d,b=%0d,c=%0d\n",a,b,c);
  endfunction

endclass

module top;
 initial
  begin
    msd m=new();
    m.c=m.sum();
    m.display();
   end
endmodule
```

Simulation

```
Compiler version U-2023.03-SP2_Full64; Runtime version U-2023.03-SP2_Full64;  Apr

a=10,b=20,c=30

        V C S   S i m u l a t i o n   R e p o r t
Time: 0 ns
CPU Time:      0.490 seconds;      Data structure size:   0.0Mb
Sat Apr 12 11:59:11 2025
```

Code4

```
class msd;

  int a;
  int b;
  int c;

  function int sum();
   a=10; b=20;
   return a+b;
  endfunction

endclass

module top;
 initial
  begin
   msd m=new();
   m.c=m.sum();

    $display("\na=%0d b=%0d c=%0d\n",m.a,m.b,m.c);
  end
endmodule
```

Simulation

```
Compiler version U-2023.03-SP2_Full64; Runtime version U-2023.03-SP2_Full64;  Apr 12 12:04 2025

a=10 b=20 c=30

        V C S   S i m u l a t i o n   R e p o r t
Time: 0 ns
CPU Time:      0.480 seconds;      Data structure size:   0.0Mb
Sat Apr 12 12:04:52 2025
```