

```
1 class first;
2
3   int data;
4
5 endclass
6
7 module tb;
8
9   first f1;
10  first p1;
11
12  initial begin
13    f1 = new(); //생성자
14
15    f1.data = 24; // processing
16
17    p1 = new f1; // f1객체의 데이터멤버를 p1 으로 복사
18
19    $display ("Value of data member : %0d", p1.data);
20  end
21
22 endmodule
```

```
Parsing design file 'copying_object.sv'
Top Level Modules:
  tb
No TimeScale specified
Starting vcs inline pass...
1 module and 0 UDP read.
recompiling module tb
rm -f _csrc*.so pre_vcsobj*.so share_vcsobj*.so
if [ -x ../simv ]; then chmod -x ../simv; fi
g++ -o ../simv -no-pie -Wl,--no-as-needed -Wl,-rpath-link=../ -Wl,-rpath='$(ORIGIN)/simv.daidir' -Wl,-rpath=../simv.daidir/ -Wl,-rpath='$(ORIGIN)/simv.daidir/scsim.db.dir' -L/usr/lib/x86_64-linux-gnu -L/lib/x86_64-linux-gnu -Wl,--no-as-needed -rdynamic -Wl,-rpath=/usr/stone/software/vcs2018/vcs/0-2018.09-SP2/linux64/lib -L/usr/stone/software/vcs2018/vcs/0-2018.09-SP2/linux64/lib -o bjs/amcQw_d.o _20148_archive_1.so SIM_l.o rmapats_mop.o rmapats.o rmar.o rmar_nd.o rmar_llvm_0_1.o rmar_llvm_0_0.o -lzerosoft_rt_stubs -lvrsim -lerrorinf -lsnpsmalloc -lvfs -lvcsnew -lsimprofile -luclinate /usr/stone/software/vcs2018/vcs/0-2018.09-SP2/linux64/lib/vcs_tls.o -Wl,-whole-archive -lvcsucli -Wl,-no-whole-archive _vcs_pli_stub.o /usr/stone/software/vcs2018/vcs/0-2018.09-SP2/linux64/lib/vcs_save_restore_new.o /usr/stone/software/verdi/verdi/Verdi_0-2018.09-SP2/share/PLI/VCS/LINUX64/pli.a -ldl -lc -lm -lphread -ldl
../simv up to date
CPU time: .137 seconds to compile + .114 seconds to elab + .185 seconds to link
Verdi KDB elaboration done and the database successfully generated: 0 error(s), 0 warning(s)
stone@ubuntu:~/System_Verilog_Udemy/3_OOP/11_Copying_Object$ ./simv
Chronologic VCS simulator copyright 1991-2018
Contains Synopsys proprietary information.
Compiler version 0-2018.09-SP2_Full64; Runtime version 0-2018.09-SP2_Full64; Aug 26 02:04 2023
Value of data member : 24
VCS Simulation Report
Time: 0
CPU Time: 0.130 seconds; Data structure size: 0.0Mb
Sat Aug 26 02:04:40 2023
stone@ubuntu:~/System_Verilog_Udemy/3_OOP/11_Copying_Object$
```

```
1 class first;
2
3   int data;
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5 endclass
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7 module tb;
8
9   first f1;
10  first p1;
11
12  initial begin
13    f1 = new(); //생성자
14
15    f1.data = 24; // processing
16
17    p1 = new f1; // f1의 데이터멤버를 p1 으로 복사
18
19    $display ("Value of data member : %0d", p1.data);
20
21    p1.data = 12;
22
23    $display ("Vlaue of data member : %0d", f1.data); //p1의 데이터 멤버의 값을
    변경해도 f1의 데이터 값은 변경되지 않음, 단순히 복사본만 있음
24  end
25
26 endmodule
```

```
Starting vcs inline pass...
1 module and 0 UDP read.
recompiling module tb
rm -f _csrc*.so pre_vcsobj*.so share_vcsobj*.so
ld -shared -Bsymbolic -o ../simv.daidir/_csrc0.so bjs/amcQw_d.o
rm -f _csrc0.so
if [ -x ../simv ]; then chmod -x ../simv; fi
g++ -o ../simv -no-pie -Wl,--no-as-needed -Wl,-rpath-link=../ -Wl,-rpath='$(ORIGIN)/simv.daidir' -Wl,-rpath=../simv.daidir/ -Wl,-rpath='$(ORIGIN)/simv.daidir/scsim.db.dir' -L/usr/lib/x86_64-linux-gnu -L/lib/x86_64-linux-gnu -Wl,--no-as-needed -rdynamic -Wl,-rpath=/usr/stone/software/vcs2018/vcs/0-2018.09-SP2/linux64/lib -L/usr/stone/software/vcs2018/vcs/0-2018.09-SP2/linux64/lib -o _22207_archive_1.so _prev_archive_1.so _csrc0.so SIM_l.o _csrc0.so rmapats_mop.o rmapats.o rmar.o rmar_nd.o rmar_llvm_0_1.o rmar_llvm_0_0.o -lzerosoft_rt_stubs -lvrsim -lerrorinf -lsnpsmalloc -lvfs -lvcsnew -lsimprofile -luclinate /usr/stone/software/vcs2018/vcs/0-2018.09-SP2/linux64/lib/vcs_tls.o -Wl,-whole-archive -lvcsucli -Wl,-no-whole-archive _vcs_pli_stub.o /usr/stone/software/vcs2018/vcs/0-2018.09-SP2/linux64/lib/vcs_save_restore_new.o /usr/stone/software/verdi/verdi/Verdi_0-2018.09-SP2/share/PLI/VCS/LINUX64/pli.a -ldl -lc -lm -lphread -ldl
../simv up to date
CPU time: .139 seconds to compile + .116 seconds to elab + .193 seconds to link
Verdi KDB elaboration done and the database successfully generated: 0 error(s), 0 warning(s)
stone@ubuntu:~/System_Verilog_Udemy/3_OOP/11_Copying_Object$ ./simv
Chronologic VCS simulator copyright 1991-2018
Contains Synopsys proprietary information.
Compiler version 0-2018.09-SP2_Full64; Runtime version 0-2018.09-SP2_Full64; Aug 26 02:15 2023
Value of data member : 24
Vlaue of data member : 24
VCS Simulation Report
Time: 0
CPU Time: 0.130 seconds; Data structure size: 0.0Mb
Sat Aug 26 02:15:42 2023
stone@ubuntu:~/System_Verilog_Udemy/3_OOP/11_Copying_Object$
```