Ex_1_fo.sv

Output of Overidding of xtn(base class) with small_xtn(extended class):

```
# UVM_INFO verilog_src/questa_uvm_pkg-1.2/src/questa_uvm_pkg.sv(278) @ 0: reporter [Questa UVM]  questa_uvm::init(+struct)
# ------------------------------
# Name    Type       Size  Value
# ------------------------------
# xt1      xtn        -     @466
#   addr   integral   4     'h5
#   data   integral   5     'ha
# ------------------------------
# I am in the BASE class
# ------------------------------
# Name    Type       Size  Value
# ------------------------------
# xt1      xtn        -     @466
#   addr   integral   4     'h5
#   data   integral   5     'ha
# ------------------------------
# I am in the BASE class
#
#### Factory Configuration (*)
#
# No instance overrides are registered with this factory
#
# Type Overrides:
#
#   Requested Type  Override Type
#   --------------  -------------
#   xtn             small_xtn
#
# All types registered with the factory: 41 total
# (types without type names will not be printed)
#
#   Type Name
#   ---------
#   big_xtn
#   questa_uvm_recorder
#   small_xtn
#   small_xtn1
#   xtn
# (*) Types with no associated type name will be printed as <unknown>
# (*) Types with no associated type name will be printed as <unknown>
#
####
#
# ------------------------------
# Name    Type       Size  Value
# ------------------------------
# xt1      small_xtn  -     @470
#   addr   integral   4     'h2
#   data   integral   5     'h4
# ------------------------------
# I am in Small_xtn Extended class
# addr1 = 10
# 65868
# ------------------------------
# Name    Type       Size  Value
# ------------------------------
# xt1      small_xtn  -     @470
#   addr   integral   4     'h2
#   data   integral   5     'h4
# ------------------------------
# I am in Small_xtn Extended class
# addr1 = 10
# 65868
# UVM_INFO @ 0: reporter [TPREGR] Original object type 'xtn' already registered to produce 'small_xtn'.  Replacing with overri
de to produce type 'small_xtn1'.
#
```

Output of Overidding of xtn(base class) with small_xtn1(extended class) small_xtn1 is ec of small_xtn,
and small_xtn is ec of xtn:

```
#### Factory Configuration (*)
#
# No instance overrides are registered with this factory
#
# Type Overrides:
#
#   Requested Type  Override Type
#   --------------  -------------
#   xtn             small_xtn1
#
# All types registered with the factory: 41 total
# (types without type names will not be printed)
#
#   Type Name
#   ---------
#   big_xtn
#   questa_uvm_recorder
#   small_xtn
#   small_xtn1
#   xtn
# (*) Types with no associated type name will be printed as <unknown>
#
####
#
# ------------------------------
# Name     Type         Size  Value
# ------------------------------
# xt1      small_xtn1   -     @474
#   addr   integral     4     'h1
#   data   integral     5     'h2
# ------------------------------
# I am in Small_xtn Extended class
# addr1 = 10
# 65869
# ------------------------------
# Name     Type         Size  Value
# ------------------------------
# xt1      small_xtn1   -     @474
#   addr   integral     4     'h1
#   data   integral     5     'h2
# ------------------------------
# I am in Small_xtn Extended class
# addr1 = 10
```

```
# I am in Small_xtn Extended class
# addr1 = 10
# 65869
# UVM_INFO @ 0: reporter [TPREGR] Original object type 'xtn' already registered to produce 'small_xtn1'.  Replacing with overr
ide to produce type 'big_xtn'.
```

Output of big_xtn(base class) with overridding

```
#
#### Factory Configuration (*)
#
# No instance overrides are registered with this factory
#
# Type Overrides:
#
#   Requested Type  Override Type
#   --------------  -------------
#   xtn             big_xtn
#
# All types registered with the factory: 41 total
# (types without type names will not be printed)
#
#   Type Name
#   ---------
#   big_xtn
#   questa_uvm_recorder
#   small_xtn
#   small_xtn1
#   xtn
# (*) Types with no associated type name will be printed as <unknown>
#
####
#
# ----------------------------
# Name    Type       Size  Value
# ----------------------------
# xt1     big_xtn    -     @478
#   addr  integral   4     'h8
#   data  integral   5     'hf
# ----------------------------
# I am in Big_xtn Extennded Class
# ----------------------------
# Name    Type       Size  Value
# ----------------------------
# xt1     big_xtn    -     @478
#   addr  integral   4     'h8
#   data  integral   5     'hf
# ----------------------------
# I am in Big_xtn Extennded Class
```