

Table of Contents

- [Lab 01](#)
 - [Ownership](#)
 - [- Git URL for this lab](#)
 - [NOTE: Please note that this repository is private. You need to provide me with your github account to provide you access.](#)
 - [Course](#)
 - [XCASE Diagram](#)
 - [SQL Script](#)
 - [Lab](#)
 - [XCASE Diagram](#)
 - [Legend](#)
 - [SQL Script](#)
 - [Data insert and constraint testing](#)
 - [Distributor](#)
 - [Insert Commands](#)
 - [Insert Commands Results](#)
 - [Select Results](#)
 - [Testing scenario](#)
 - [Piece](#)
 - [Insert Commands](#)
 - [Insert Commands Results](#)
 - [Select Results](#)
 - [Testing scenario](#)
 - [Computer](#)
 - [Insert Commands](#)
 - [Insert Commands Results](#)
 - [Select Results](#)
 - [Testing scenario](#)
 - [Testing the View](#)

Lab 01

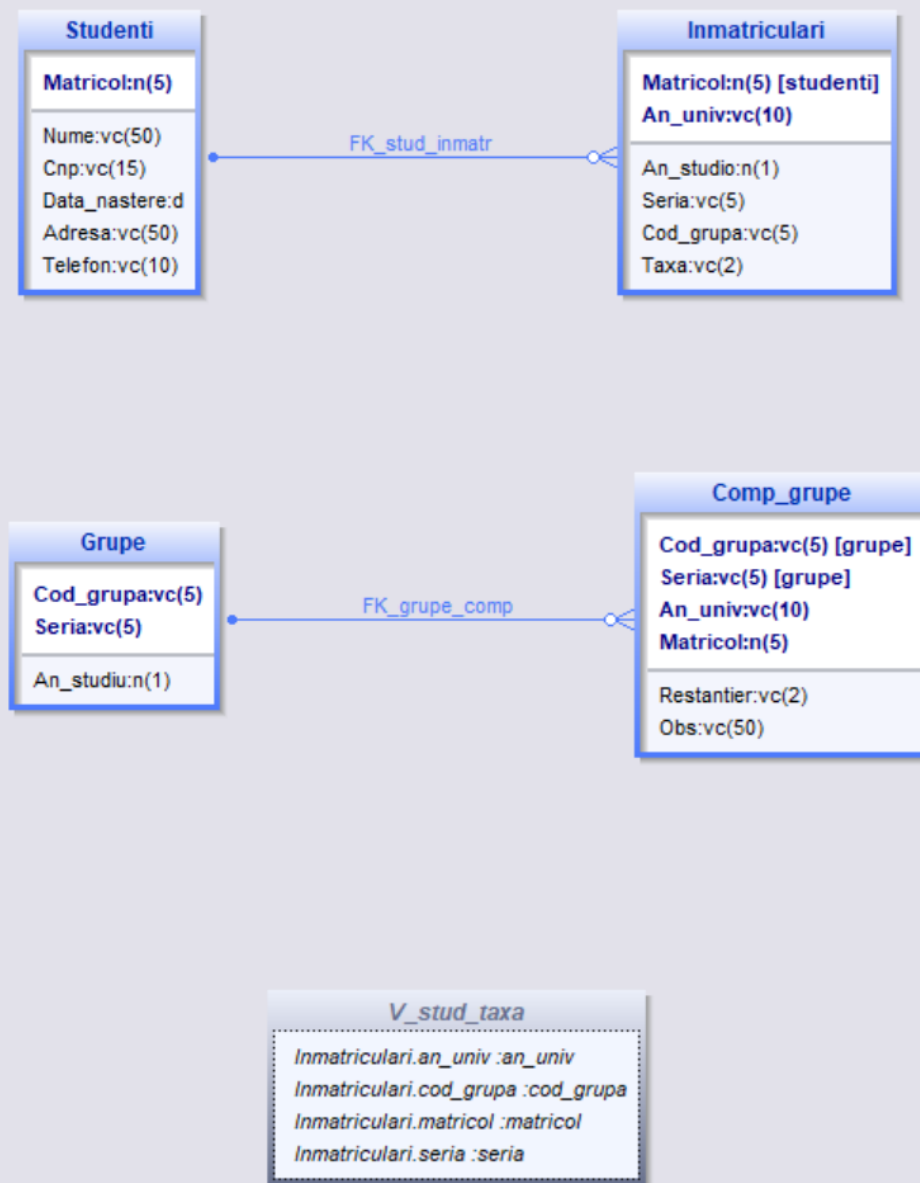
Ownership

- Student: Marius Vintila
- Group: 341C5
- [Git Repo](#)
- [Git URL for this lab](#)

NOTE: Please note that this repository is private. You need to provide me with your github account to provide you access.

Course

XCASE Diagram



SQL Script

```

CREATE TABLE Studenti
(
    Matricol NUMBER(5) NOT NULL ,
    Nume VARCHAR2(50) NULL ,
    Cnp VARCHAR2(15) NULL ,
    Data_nastere DATE NULL ,
    Adresa VARCHAR2(50) NULL ,
    Telefon VARCHAR2(10) NULL ,

```

```

CONSTRAINT PK_Studenti PRIMARY KEY (Matricol) NOT DEFERRABLE Initially IMMEDIATE
USING INDEX
PCTFREE 10
INITTRANS 2
MAXTRANS 255
STORAGE
(
    INITIAL 64K
    NEXT 0K
    MINEXTENTS 1
    MAXEXTENTS 2147483645
    PCTINCREASE 0
)
)

PCTFREE 10
PCTUSED 40
INITTRANS 1
MAXTRANS 255
STORAGE
(
    INITIAL 64K
    NEXT 0K
    MINEXTENTS 1
    MAXEXTENTS 2147483645
    PCTINCREASE 0
)
/

CREATE TABLE Comp_grupe
(
    Cod_grupa VARCHAR2(5) NOT NULL ,
    Seria VARCHAR2(5) NOT NULL ,
    An_univ VARCHAR2(10) NOT NULL ,
    Matricol NUMBER(5) NOT NULL ,
    Restantier VARCHAR2(2) NULL ,
    Obs VARCHAR2(50) NULL ,
    CONSTRAINT PK_Comp_grupe PRIMARY KEY (Cod_grupa,Seria,An_univ,Matricol) NOT
DEFERRABLE Initially IMMEDIATE
USING INDEX
PCTFREE 10
INITTRANS 2
MAXTRANS 255
STORAGE
(
    INITIAL 64K
    NEXT 0K
    MINEXTENTS 1
    MAXEXTENTS 2147483645
    PCTINCREASE 0
)
)

PCTFREE 10

```

```

PCTUSED 40
INITTRANS 1
MAXTRANS 255
STORAGE
(
    INITIAL 64K
    NEXT 0K
    MINEXTENTS 1
    MAXEXTENTS 2147483645
    PCTINCREASE 0
)
/

CREATE TABLE Inmatriculari
(
    Matricol NUMBER(5) NOT NULL ,
    An_univ VARCHAR2(10) NOT NULL ,
    An_studio NUMBER(1) NULL ,
    Seria VARCHAR2(5) NULL ,
    Cod_grupa VARCHAR2(5) NULL ,
    Taxa VARCHAR2(2) NULL ,
    CONSTRAINT PK_Inmatriculari PRIMARY KEY (Matricol,An_univ) NOT DEFERRABLE
Initially IMMEDIATE
    USING INDEX
    PCTFREE 10
    INITTRANS 2
    MAXTRANS 255
    STORAGE
    (
        INITIAL 64K
        NEXT 0K
        MINEXTENTS 1
        MAXEXTENTS 2147483645
        PCTINCREASE 0
    )
)
PCTFREE 10
PCTUSED 40
INITTRANS 1
MAXTRANS 255
STORAGE
(
    INITIAL 64K
    NEXT 0K
    MINEXTENTS 1
    MAXEXTENTS 2147483645
    PCTINCREASE 0
)
/

CREATE TABLE Grupe
(

```

```

Cod_grupa VARCHAR2(5) NOT NULL ,
Seria VARCHAR2(5) NOT NULL ,
An_studiu NUMBER(1) NULL ,
CONSTRAINT PK_Grupe PRIMARY KEY (Cod_grupa,Seria) NOT DEFERRABLE Initially
IMMEDIATE

USING INDEX
PCTFREE 10
INITRANS 2
MAXTRANS 255
STORAGE
(
    INITIAL 64K
    NEXT 0K
    MINEXTENTS 1
    MAXEXTENTS 2147483645
    PCTINCREASE 0
)
)

PCTFREE 10
PCTUSED 40
INITRANS 1
MAXTRANS 255
STORAGE
(
    INITIAL 64K
    NEXT 0K
    MINEXTENTS 1
    MAXEXTENTS 2147483645
    PCTINCREASE 0
)
/

ALTER TABLE Comp_grupe ADD
(
    CONSTRAINT FK_grupe_comp FOREIGN KEY
    ( Cod_grupa , Seria )
    REFERENCES Grupe
    ( Cod_grupa , Seria )
    NOT DEFERRABLE Initially IMMEDIATE
)
/

ALTER TABLE Inmatriculari ADD
(
    CONSTRAINT FK_stud_inmatr FOREIGN KEY
    ( Matricol )
    REFERENCES Studenti
    ( Matricol )
    NOT DEFERRABLE Initially IMMEDIATE
)
/

```

```

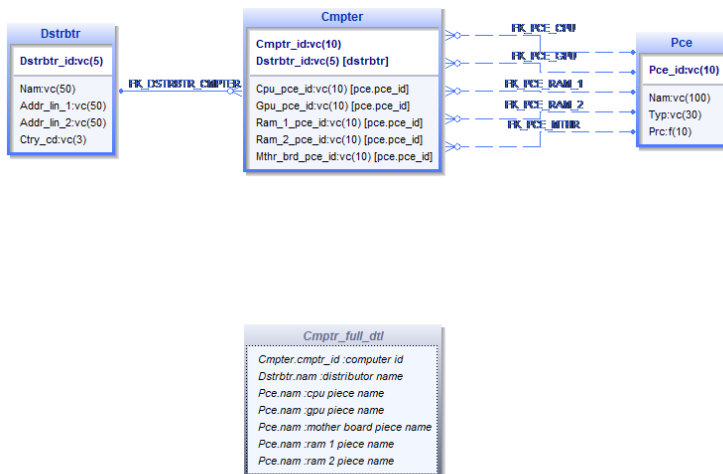
CREATE OR REPLACE FORCE VIEW V_stud_taxa
AS SELECT ALL  Inmatriculari.An_univ ,  Inmatriculari.Cod_grupa ,
Inmatriculari.Matricol ,
           Inmatriculari.Seria
FROM  Inmatriculari Inmatriculari
WHERE Inmatriculari.An_univ='2020/2021' and Inmatriculari.Taxa='DA'
/

```

Lab

I chose to use a standard that removes vowels from table and field names; Personal preference. I would've also added some lookup tables for certain values but the restriction was of only 3 tables, so I'll have to populate the tables with repeated values

XCASE Diagram



Legend

- DSTRBTR - Distributor
- NAM - Name
- ADDR_LIN - Address Line
- CTRY_CD - Country Code
- CMPTR - Computer
- PCE - Piece
- MTHR_BRD - Mother Board
- TYP - Type
- PRC - Price

SQL Script

```
CREATE TABLE DSTRBTR
(
    DSTRBTR_ID VARCHAR2(5) NOT NULL ,
    NAM VARCHAR2(50) NULL ,
    ADDR_LIN_1 VARCHAR2(50) NULL ,
    ADDR_LIN_2 VARCHAR2(50) NULL ,
    CTRY_CD VARCHAR2(3) NULL ,
    CONSTRAINT PK_DSTRBTR PRIMARY KEY (DSTRBTR_ID) NOT DEFERRABLE Initially
IMMEDIATE
    USING INDEX
    PCTFREE 10
    INITTRANS 2
    MAXTRANS 255
    STORAGE
    (
        INITIAL 64K
        NEXT 0K
        MINEXTENTS 1
        MAXEXTENTS 2147483645
        PCTINCREASE 0
    )
)
PCTFREE 10
PCTUSED 40
INITTRANS 1
MAXTRANS 255
STORAGE
(
    INITIAL 64K
    NEXT 0K
    MINEXTENTS 1
    MAXEXTENTS 2147483645
    PCTINCREASE 0
)
/
```

```
CREATE TABLE CMPTR
(
    CMPTR_ID VARCHAR2(10) NOT NULL ,
    DSTRBTR_ID VARCHAR2(5) NOT NULL ,
    CPU_PCE_ID VARCHAR2(10) NULL ,
    GPU_PCE_ID VARCHAR2(10) NULL ,
    RAM_1_PCE_ID VARCHAR2(10) NULL ,
    RAM_2_PCE_ID VARCHAR2(10) NULL ,
    MTHR_BRD_PCE_ID VARCHAR2(10) NULL ,
    CONSTRAINT PK_CMPTR PRIMARY KEY (CMPTR_ID,DSTRBTR_ID) NOT DEFERRABLE
Initially IMMEDIATE
    USING INDEX
    PCTFREE 10
    INITTRANS 2
```

```

MAXTRANS 255
STORAGE
(
    INITIAL 64K
    NEXT 0K
    MINEXTENTS 1
    MAXEXTENTS 2147483645
    PCTINCREASE 0
)
)
PCTFREE 10
PCTUSED 40
INITTRANS 1
MAXTRANS 255
STORAGE
(
    INITIAL 64K
    NEXT 0K
    MINEXTENTS 1
    MAXEXTENTS 2147483645
    PCTINCREASE 0
)
/

```

```

CREATE TABLE PCE
(
    PCE_ID VARCHAR2(10) NOT NULL ,
    NAM VARCHAR2(100) NULL ,
    TYP VARCHAR2(30) NULL ,
    PRC FLOAT(10) NULL ,
    CONSTRAINT PK_PCE PRIMARY KEY (PCE_ID) NOT DEFERRABLE Initially IMMEDIATE
    USING INDEX
    PCTFREE 10
    INITTRANS 2
    MAXTRANS 255
    STORAGE
    (
        INITIAL 64K
        NEXT 0K
        MINEXTENTS 1
        MAXEXTENTS 2147483645
        PCTINCREASE 0
    )
)
PCTFREE 10
PCTUSED 40
INITTRANS 1
MAXTRANS 255
STORAGE
(
    INITIAL 64K
    NEXT 0K

```



```
MINEXTENTS 1
MAXEXTENTS 2147483645
PCTINCREASE 0
)
/
```

```
ALTER TABLE CMPTR ADD
(
  CONSTRAINT FK_DSTRBTR_CMPTR FOREIGN KEY
    ( DSTRBTR_ID )
  REFERENCES DSTRBTR
    ( DSTRBTR_ID )
  NOT DEFERRABLE Initially IMMEDIATE
)
/
```

```
ALTER TABLE CMPTR ADD
(
  CONSTRAINT FK_PCE_CPU FOREIGN KEY
    ( CPU_PCE_ID )
  REFERENCES PCE
    ( PCE_ID )
  NOT DEFERRABLE Initially IMMEDIATE
)
/
```

```
ALTER TABLE CMPTR ADD
(
  CONSTRAINT FK_PCE_GPU FOREIGN KEY
    ( GPU_PCE_ID )
  REFERENCES PCE
    ( PCE_ID )
  NOT DEFERRABLE Initially IMMEDIATE
)
/
```

```
ALTER TABLE CMPTR ADD
(
  CONSTRAINT FK_PCE_RAM_1 FOREIGN KEY
    ( RAM_1_PCE_ID )
  REFERENCES PCE
    ( PCE_ID )
  NOT DEFERRABLE Initially IMMEDIATE
)
/
```

```
ALTER TABLE CMPTR ADD
(
  CONSTRAINT FK_PCE_RAM_2 FOREIGN KEY
    ( RAM_2_PCE_ID )
  REFERENCES PCE

```

```

    ( PCE_ID )
    NOT DEFERRABLE Initially IMMEDIATE
)
/

```

```

ALTER TABLE CMPTR ADD
(
    CONSTRAINT FK_PCE_MTHR FOREIGN KEY
    ( MTHR_BRD_PCE_ID )
    REFERENCES PCE
    ( PCE_ID )
    NOT DEFERRABLE Initially IMMEDIATE
)
/

```

```

CREATE OR REPLACE FORCE VIEW CMPTR_FULL_DTL
AS SELECT ALL  CMPTR.CMPTR_ID AS "Computer ID" ,  DSTRBTR.NAM AS "Distributor
Name" ,
    PCE.NAM AS "CPU Piece Name" ,  PCE_0.NAM AS "GPU Piece Name" ,
    PCE_1.NAM AS "Ram 1 Piece Name" ,  PCE_2.NAM AS "Ram 2 Piece Name" ,
    PCE_3.NAM AS "Mother Board Piece Name"
FROM  CMPTR CMPTR ,  DSTRBTR DSTRBTR ,  PCE PCE ,  PCE PCE_0 ,
    PCE PCE_1 ,  PCE PCE_2 ,  PCE PCE_3
WHERE CMPTR.DSTRBTR_ID = DSTRBTR.DSTRBTR_ID
AND  CMPTR.CPU_PCE_ID = PCE.PCE_ID
AND  CMPTR.GPU_PCE_ID = PCE_0.PCE_ID
AND  CMPTR.RAM_1_PCE_ID = PCE_1.PCE_ID
AND  CMPTR.RAM_2_PCE_ID = PCE_2.PCE_ID
AND  CMPTR.MTHR_BRD_PCE_ID = PCE_3.PCE_ID
ORDER BY  "Distributor Name" , "Computer ID"
/

```

Data insert and conraint testing

Distributor

Insert Commands

```

insert into DSTRBTR (DSTRBTR_ID, NAM, ADDR_LIN_1, ADDR_LIN_2, CTRY_CD) VALUES
('00001', 'Asus', 'Beitou District, Taipei, Taiwan', NULL, 'TW');
insert into DSTRBTR (DSTRBTR_ID, NAM, ADDR_LIN_1, ADDR_LIN_2, CTRY_CD) VALUES
('00002', 'Kingston', 'Fountain Valley, California, Statele Unite', NULL, 'US');
insert into DSTRBTR (DSTRBTR_ID, NAM, ADDR_LIN_1, ADDR_LIN_2, CTRY_CD) VALUES
('00003', 'Intel', 'Santa Clara, California, Statele Unite', NULL, 'US');
insert into DSTRBTR (DSTRBTR_ID, NAM, ADDR_LIN_1, ADDR_LIN_2, CTRY_CD) VALUES
('00004', 'Nvidia', 'Santa Clara, California, Statele Unite', '2788 San Tomas
Expressway Santa Clara, CA 95051', 'US');
insert into DSTRBTR (DSTRBTR_ID, NAM, ADDR_LIN_1, ADDR_LIN_2, CTRY_CD) VALUES
('00004', 'AMD', 'Santa Clara, California, Statele Unite', '2788 San Tomas Expressway
Santa Clara, CA 95051', 'US');

```

Insert Commands Results

SQL Worksheet

```
1 insert into DSTRBTR (DSTRBTR_ID, NAM, ADDR_LIN_1, ADDR_LIN_2, CTRY_CD) VALUES
2 ('00001', 'Asus', 'Beitou District, Taipei, Taiwan', NULL, 'TW');
3 insert into DSTRBTR (DSTRBTR_ID, NAM, ADDR_LIN_1, ADDR_LIN_2, CTRY_CD) VALUES
4 ('00002', 'Kingston', 'Fountain Valley, California, Statele Unite', NULL, 'US');
5 insert into DSTRBTR (DSTRBTR_ID, NAM, ADDR_LIN_1, ADDR_LIN_2, CTRY_CD) VALUES
6 ('00003', 'Intel', 'Santa Clara, California, Statele Unite', NULL, 'US');
7 insert into DSTRBTR (DSTRBTR_ID, NAM, ADDR_LIN_1, ADDR_LIN_2, CTRY_CD) VALUES
8 ('00004', 'Nvidia', 'Santa Clara, California, Statele Unite', '2788 San Tomas Expressway Santa Clara, CA 95051', 'US');
9 insert into DSTRBTR (DSTRBTR_ID, NAM, ADDR_LIN_1, ADDR_LIN_2, CTRY_CD) VALUES
10 ('00004', 'AMD', 'Santa Clara, California, Statele Unite', '2788 San Tomas Expressway Santa Clara, CA 95051', 'US');
11
```

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

ORA-00001: unique constraint (SQL_ROCIPUNOUBTGFEQXDL0TSNY.PK_DSTRBTR) violated ORA-06512: at "SYS.DBMS_SQL", line 1721

Select Results

SQL Worksheet

```
1 select
2 "DSTRBTR_ID",
3 "NAM",
4 "ADDR_LIN_1",
5 "ADDR_LIN_2",
6 "CTRY_CD"
7 from "DSTRBTR";
```

DSTRBTR_ID	NAM	ADDR_LIN_1	ADDR_LIN_2	CTRY_CD
00001	Asus	Beitou District, Taipei, Taiwan	-	TW
00002	Kingston	Fountain Valley, California, Statele Unite	-	US
00003	Intel	Santa Clara, California, Statele Unite	-	US
00004	Nvidia	Santa Clara, California, Statele Unite	2788 San Tomas Expressway Santa Clara, CA 95051	US

Download CSV
4 rows selected.

Testing scenario

- Attempted to insert the same PK in another command

Piece

Insert Commands

```
INSERT INTO PCE (PCE_ID, NAM, TYP, PRC) VALUES
('0000000001', 'HyperX Predator Black 16GB, DDR4, 3200MHz, CL16, 1.35V', 'RAM',
95.79);
INSERT INTO PCE (PCE_ID, NAM, TYP, PRC) VALUES
('0000000002', 'HyperX Predator RGB 32GB DDR4 3200MHz CL16', 'RAM', 324.99);
INSERT INTO PCE (PCE_ID, NAM, TYP, PRC) VALUES
('0000000003', 'ASUS Phoenix GeForce GTX 1650 OC, 4GB GDDR5, 128-bit', 'GPU', 399.99);
INSERT INTO PCE (PCE_ID, NAM, TYP, PRC) VALUES
('0000000004', 'Intel Core i9-10900K Comet Lake, 3.70GHz, 20MB, Socket 1200', 'CPU',
```

```
500.00);
INSERT INTO PCE (PCE_ID, NAM, TYP, PRC) VALUES
('0000000005', 'ASUS TUF GAMING B460-PLUS, Socket 1200', 'Mother Board', 330.79);
INSERT INTO PCE (PCE_ID, NAM, TYP, PRC) VALUES
('0000000001', 'HyperX Predator Black 16GB, DDR4, 3200MHz, CL16, 1.35V', 'RAM',
95.79);
```

Insert Commands Results

SQL Worksheet

1	INSERT INTO PCE (PCE_ID, NAM, TYP, PRC) VALUES	
2	('0000000001', 'HyperX Predator Black 16GB, DDR4, 3200MHz, CL16, 1.35V', 'RAM', 95.79);	
3	INSERT INTO PCE (PCE_ID, NAM, TYP, PRC) VALUES	
4	('0000000002', 'HyperX Predator RGB 32GB DDR4 3200MHz CL16', 'RAM', 324.99);	
5	INSERT INTO PCE (PCE_ID, NAM, TYP, PRC) VALUES	
6	('0000000003', 'ASUS Phoenix GeForce GTX 1650 OC, 4GB GDDR5, 128-bit', 'GPU', 399.99);	
7	INSERT INTO PCE (PCE_ID, NAM, TYP, PRC) VALUES	
8	('0000000004', 'Intel Core i9-10900K Comet Lake, 3.70GHz, 20MB, Socket 1200', 'CPU', 500.00);	
9	INSERT INTO PCE (PCE_ID, NAM, TYP, PRC) VALUES	
10	('0000000005', 'ASUS TUF GAMING B460-PLUS, Socket 1200', 'Mother Board', 330.79);	
11	INSERT INTO PCE (PCE_ID, NAM, TYP, PRC) VALUES	
12	('0000000001', 'HyperX Predator Black 16GB, DDR4, 3200MHz, CL16, 1.35V', 'RAM', 95.79);	

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

ORA-00001: unique constraint (SQL_ROCIPUNOUBTGFEXQXDLOTSNY.PK_PCE) violated ORA-06512: at "SYS.DBMS_SQL", line 1721

Select Results

PCE_ID	NAM	TYP	PRC
0000000001	HyperX Predator Black 16GB, DDR4, 3200MHz, CL16, 1.35V	RAM	95.79
0000000002	HyperX Predator RGB 32GB DDR4 3200MHz CL16	RAM	325
0000000003	ASUS Phoenix GeForce GTX 1650 OC, 4GB GDDR5, 128-bit	GPU	400
0000000004	Intel Core i9-10900K Comet Lake, 3.70GHz, 20MB, Socket 1200	CPU	500
0000000005	ASUS TUF GAMING B460-PLUS, Socket 1200	Mother Board	330.8

Download CSV

5 rows selected.

Testing scenario

- Attempted to insert the same PK in another command

Computer

Insert Commands

```

INSERT INTO CMPTR (CMPTR_ID, DSTRBTR_ID, CPU_PCE_ID, GPU_PCE_ID, RAM_1_PCE_ID,
RAM_2_PCE_ID, MTHR_BRD_PCE_ID) VALUES
('0000000001', '00001', '0000000004', '0000000003', '0000000001', '0000000001',
'0000000005');

INSERT INTO CMPTR (CMPTR_ID, DSTRBTR_ID, CPU_PCE_ID, GPU_PCE_ID, RAM_1_PCE_ID,
RAM_2_PCE_ID, MTHR_BRD_PCE_ID) VALUES
('0000000001', NULL, '0000000004', '0000000003', '0000000001', '0000000001',
'0000000005');

INSERT INTO CMPTR (CMPTR_ID, DSTRBTR_ID, CPU_PCE_ID, GPU_PCE_ID, RAM_1_PCE_ID,
RAM_2_PCE_ID, MTHR_BRD_PCE_ID) VALUES
('0000000001', '00001', '0000000004', '0000000003', '0000000001', '0000000001',
'0000000006');

```

Insert Commands Results

SQL Worksheet

1	INSERT INTO CMPTR (CMPTR_ID, DSTRBTR_ID, CPU_PCE_ID, GPU_PCE_ID, RAM_1_PCE_ID, RAM_2_PCE_ID, MTHR_BRD_PCE_ID) VALUES
2	('0000000001', '00001', '0000000004', '0000000003', '0000000001', '0000000001', '0000000005');
3	INSERT INTO CMPTR (CMPTR_ID, DSTRBTR_ID, CPU_PCE_ID, GPU_PCE_ID, RAM_1_PCE_ID, RAM_2_PCE_ID, MTHR_BRD_PCE_ID) VALUES
4	('0000000001', NULL, '0000000004', '0000000003', '0000000001', '0000000001', '0000000005');
5	INSERT INTO CMPTR (CMPTR_ID, DSTRBTR_ID, CPU_PCE_ID, GPU_PCE_ID, RAM_1_PCE_ID, RAM_2_PCE_ID, MTHR_BRD_PCE_ID) VALUES
6	('0000000001', '00001', '0000000004', '0000000003', '0000000001', '0000000001', '0000000006');

1 row(s) inserted.

ORA-01400: cannot insert NULL into ("SQL_ROCIPUNOUBTGFEQXQXDLOTSNY"."CMPTR"."DSTRBTR_ID") ORA-06512: at "SYS.DBMS_SQL", line 1721

ORA-00001: unique constraint (SQL_ROCIPUNOUBTGFEQXQXDLOTSNY.PK_CMPTR) violated ORA-06512: at "SYS.DBMS_SQL", line 1721

1	INSERT INTO CMPTR (CMPTR_ID, DSTRBTR_ID, CPU_PCE_ID, GPU_PCE_ID, RAM_1_PCE_ID, RAM_2_PCE_ID, MTHR_BRD_PCE_ID) VALUES
2	('0000000002', '00001', '0000000004', '0000000003', '0000000001', '0000000001', '0000000006');

ORA-02291: integrity constraint (SQL_ROCIPUNOUBTGFEQXQXDLOTSNY.FK_PCE_MTHR) violated - parent key not found ORA-06512: at "SYS.DBMS_SQL", line 1721

Select Results

CMPTR_ID	DSTRBTR_ID	CPU_PCE_ID	GPU_PCE_ID	RAM_1_PCE_ID	RAM_2_PCE_ID	MTHR_BRD_PCE_ID
0000000001	00001	0000000004	0000000003	0000000001	0000000001	0000000005

[Download CSV](#)

Testing scenario

- Attempted to insert NULL in column part of PK
- Attempted to insert the same PK in another command
- Attempted to insert FK with inexisting value

Testing the View

SQL Worksheet

```
1 select
2     "Computer ID",
3     "Distributor Name",
4     "CPU Place Name",
5     "GPU Place Name",
6     "Ram 1 Place Name",
7     "Ram 2 Place Name",
8     "Mother Board Place Name"
9 from "CMPTA_FULL_DTL";
```

Computer ID	Distributor Name	CPU Place Name	GPU Place Name	Ram 1 Place Name	Ram 2 Place Name	Mother Board Place Name
0000000001	Asus	Intel Core i9-10900K Comet Lake, 3.70GHz, 20MB, Socket 1200	ASUS Phoenix GeForce GTX 1650 OC, 4GB GDDR5, 128-bit	HyperX Predator Black 16GB, DDR4, 3200MHz, CL16, 1.35V	HyperX Predator Black 16GB, DDR4, 3200MHz, CL16, 1.35V	ASUS TUF GAMING B460-PLUS, Socket 1200

Download CSV