

1.

**SQL Query Command:**

```
insert into RESEARCHER
values (11111,'ahmed khaled',0505451232,'xa@gmail.com','governmental');
```

**SQL Query Command:**

```
insert into RESEARCHER
values (44444,'saleh sultan',0565951582,'uiu@gmail.com','governmental');
```

**SQL Query Command:**

```
insert into RESEARCHER
values (22222,'ali saad',0555441122,'aa@gmail.com','governmental');
```

**SQL Query Command:**

```
insert into RESEARCHER
values (33333,'mohammed ali',0555551234,'mohali@gmail.com','governmental');
```

**SQL\*Plus Output:**

RESEARCHERID	FULLNAME	MOBILE	EMAIL
11111	ahmed khaled	505451232	xa@gmail.com
44444	saleh sultan	565951582	uiu@gmail.com
22222	ali saad	555441122	aa@gmail.com
33333	mohammed ali	555551234	mohali@gmail.com

**SQL Query Command:**

```
insert into PAPER
values (212,'Technology of things',2015,'It new trends','KSA');
```

**SQL Query Command:**

```
insert into PAPER
values (331,'robots',2017,'AI','KSA');
```

**SQL Query Command:**

```
insert into PAPER
```

```
values (221,'Health care',2016,'Health affects','KSA');
```

#### SQL Query Command:

```
insert into PAPER  
values (230,'Data science',2017,'Data usage','UAE');
```

#### SQL\*Plus Output:

PAPERNUM	PAPERTITLE	PUBLICATIONYEAR	CONFERENCELOCATION	CONFERENCENAME
KSA	212 Technology of things	2015		It new trends
KSA	331 robots	2017		AI
KSA	221 Health care	2016		Health affects

  

PAPERNUM	PAPERTITLE	PUBLICATIONYEAR	CONFERENCELOCATION	CONFERENCENAME
UAE	230 Data science	2017		Data usage

#### SQL Query Command:

```
insert into CONTRIBUTETO  
values (212,33333,'first',1004);
```

#### SQL Query Command:

```
insert into CONTRIBUTETO  
values (331,44444,'second',1250);
```

#### SQL Query Command:

```
insert into CONTRIBUTETO  
values (221,44444,'second',1250);
```

#### SQL Query Command:

```
insert into CONTRIBUTETO  
values (331,33333,'second',1100);
```

#### SQL Query Command:

```
insert into CONTRIBUTETO  
values (221,11111,'first',1010);
```

#### SQL Query Command:

```
insert into CONTRIBUTETO
```

```
values (230,22222,'second',850);
```

**SQL Query Command:**

```
insert into CONTRIBUTETO  
values (230,11111,'first',850);
```

**SQL Query Command:**

```
insert into CONTRIBUTETO  
values (221,22222,'second',1010);
```

**SQL\*Plus Output:**

PAPERNUM	RESEARCHER	CONTRIBUTE	FEES
212	33333	first	1004
331	44444	second	1250
221	44444	second	1250
331	33333	second	1100
221	11111	first	1010
230	22222	second	850
230	11111	first	850
221	22222	second	1010

2.

**SQL Query Command:**

```
alter table CONTRIBUTETO  
drop constraint FK_CONTRIBU_RELATION__RESEARCH;
```

**SQL\*Plus Output:**

```
SQL> alter table CONTRIBUTETO  
2 drop constraint FK_CONTRIBU_RELATION__RESEARCH;
```

Table altered.

**SQL Query Command:**

```
alter table CONTRIBUTETO  
drop constraint FK_CONTRIBU_RELATION__PAPER;
```

**SQL\*Plus Output:**

```
SQL> alter table CONTRIBUTETO  
2 drop constraint FK_CONTRIBU_RELATION__PAPER;
```

Table altered.

**SQL Query Command:**

```
alter table CONTRIBUTETO
```

```
add constraint FK_CONTRIBU_RELATION__RESEARCH foreign key
(RESEARCHER)
references RESEARCHER (RESEARCHERID) on delete cascade;
```

**SQL\*Plus Output:**

```
SQL> alter table CONTRIBUTETO
2      add constraint FK_CONTRIBU_RELATION__RESEARCH foreign key (RESEARCHER)
3      references RESEARCHER (RESEARCHERID) on delete cascade;
```

Table altered.

**SQL Query Command:**

```
alter table CONTRIBUTETO
add constraint FK_CONTRIBU_RELATION__PAPER foreign key (PAPERNUM)
references PAPER (PAPERNUM) on delete cascade;
```

**SQL\*Plus Output:**

```
SQL> alter table CONTRIBUTETO
2      add constraint FK_CONTRIBU_RELATION__PAPER foreign key (PAPERNUM)
3      references PAPER (PAPERNUM) on delete cascade;
```

Table altered.

3.

**SQL Query Command:**

```
update CONTRIBUTETO
set fees = fees + fees * 0.1
where RESEARCHER in (select RESEARCHERID from researcher,paper,contributeto
where CONTRIBUTETO.RESEARCHER = researcher.researcherid
and PAPER.PAPERNUM = CONTRIBUTETO.PAPERNUM and CONTRIBUTETYPE =
'first' and AFFILIATION = 'governmental' and CONFERENCELOCATION <> 'KSA');
```

**SQL\*Plus Output:**

```
SQL> update CONTRIBUTETO
2 set fees = fees + fees * 0.1
3 where RESEARCHER in (select RESEARCHERID from researcher,paper,contributeto where CONTRIBUTETO.
RESEARCHER = researcher.researcherid
4 and PAPER.PAPERNUM = CONTRIBUTETO.PAPERNUM and CONTRIBUTETYPE = 'first' and AFFILIATION = 'gove
rnmental' and CONFERENCELOCATION <> 'KSA');
```

2 rows updated.

4.

**SQL Query Command:**

---

```

select fullname,researcherid,email
from researcher,paper,contributeto
where PUBLICATIONYEAR = 2017 and fees>1000 and CONFERENCELOCATION='KSA'
and
paper.papernum=contributeto.papernum
and
contributeto.researcher=researcher.researcherid and researcherid not in(select researcherid
from researcher,paper,contributeto where publicationyear = 2016 and
paper.papernum=contributeto.papernum and contributeto.researcher=researcher.researcherid);

```

### SQL\*Plus Output:

```

SQL> select fullname,researcherid,email
2  from researcher,paper,contributeto
3  where PUBLICATIONYEAR = 2017 and fees>1000 and CONFERENCELOCATION='KSA'
4  and paper.papernum=contributeto.papernum
5  and contributeto.researcher=researcher.researcherid
6  and researcherid not in
7  (select researcherid from researcher,paper,contributeto
8  where publicationyear = 2016 and paper.papernum=contributeto.papernum and contributeto.research
er=researcher.researcherid
9  );

```

FULLNAME	RESEARCHERID	EMAIL
mohammed ali	33333	mohali@gmail.com

5.

### SQL Query Command:

```

SELECT count(*)
from researcher,paper,contributeto
where paper.papernum=contributeto.papernum and
contributeto.researcher=researcher.researcherid
and CONTRIBUTETYPE = 'first' and PUBLICATIONYEAR = 2015 and email is not null
and CONFERENCEName = 'It new trends';

```

### SQL\*Plus Output:

```

SQL> SELECT count(*)
2  from researcher,paper,contributeto
3  where paper.papernum=contributeto.papernum and contributeto.researcher=researcher.researcherid
4  and CONTRIBUTETYPE = 'first' and PUBLICATIONYEAR = 2015 and email is not null
5  and CONFERENCEName = 'It new trends';

```

COUNT(*)
1