

```
ALTER TABLE equipe ADD
(nb_projets NUMBER(2),
 nb_chercheurs NUMBER (2)
);
```

```
ALTER TABLE chercheur ADD
(nb_jours NUMBER(2)
);
```

```
ALTER TABLE projet ADD
(nb_chercheurs NUMBER (2),
 nb_jours NUMBER (2)
);
```

```
drop table specialite;
```

```
create table specialite
(specialite varchar(10),
 nom_specialite varchar(30),
 nb_chercheurs number(2),
 constraint pk_specialite primary key (specialite)
);
```

```
ALTER TABLE equipe
MODIFY (nom_equipe varchar(30));
```

```
ALTER TABLE projet
MODIFY (nom_projet varchar(15));
```

```
DESC equipe;
```

```
SELECT * FROM equipe;
```

```
DESC projet;
```

```
SELECT * FROM projet;
```

```
INSERT INTO specialite(specialite,nom_specialite) VALUES
('bd','bases de données');
```

```
INSERT INTO specialite(specialite,nom_specialite) VALUES
('si','systeme d'information');
```

```
INSERT INTO specialite(specialite,nom_specialite) VALUES
('oo','orienté objet');
```

```
INSERT INTO specialite(specialite,nom_specialite) VALUES
```

```
('rx','reseaux');
```

```
INSERT INTO specialite(specialite,nom_specialite) VALUES  
( 'se', 'systeme d'exploitation');
```

```
UPDATE equipe  
SET nom_equipe='Reseaux et Communication'  
WHERE n_equipe='e3';
```

```
ALTER TABLE chercheur  
ADD CONSTRAINT fk_chercheur_spec FOREIGN KEY (specialite)  
REFERENCES specialite(specialite);
```

```
ALTER TABLE chercheur  
MODIFY (specialite CONSTRAINT nn_specialite NOT NULL);
```

```
ALTER TABLE projet  
DISABLE CONSTRAINT fk_projet_eq;
```

```
SELECT constraint_name, constraint_type, table_name, status from  
USER_CONSTRAINTS  
WHERE table_name='PROJET';
```

```
SELECT constraint_name, table_name, column_name FROM USER_CONS_COLUMNS  
WHERE table_name='PROJET';
```

```
INSERT INTO projet(n_projet,nom_projet,n_equipe)  
VALUES ('p7','projet7','e4');
```

```
INSERT INTO projet(n_projet,nom_projet,n_equipe)  
VALUES ('p8','projet8','e5');
```

```
SELECT * FROM projet;
```

```
drop table rejets;
```

```
CREATE TABLE rejets  
(  
  ligne          rowid,  
  proprietaire   varchar(30),  
  nom_table      varchar(30),  
  contrainte     varchar(30)  
);
```

```
ALTER TABLE projet  
ENABLE CONSTRAINT fk_projet_eq  
EXCEPTIONS INTO rejets;
```

```
SELECT * from rejets;
```

```
SELECT rowid,p.* FROM projet p;
```

```
DELETE FROM projet  
WHERE n_projet='p7';
```

```
DELETE FROM projet  
WHERE n_projet='p8';
```

```
ALTER TABLE projet  
ENABLE CONSTRAINT fk_projet_eq  
EXCEPTIONS INTO rejets;
```

```
SELECT constraint_name, constraint_type, table_name, status from  
USER_CONSTRAINTS  
WHERE table_name='PROJET';
```

```
SELECT constraint_name, table_name, column_name FROM USER_CONS_COLUMNS  
WHERE table_name='PROJET';
```