Solution of SQL exercises on DB faculty

1.

```
SELECT name

FROM Teachers JOIN Departments ON nr_t=manager

WHERE name_dep="Chemistry";
```

2.

```
SELECT name, age

FROM Teachers NATURAL JOIN Works

    NATURAL JOIN Departments

WHERE name_dep="Physics";
```

3.

```
SELECT nr_proj, budget

FROM Teachers JOIN Projects ON nr_t=proj_manager

WHERE name="Carlos Silva";
```

4.

```
SELECT nr_proj

FROM Teachers NATURAL JOIN Works

    NATURAL JOIN Departments

    JOIN Projects ON nr_t=proj_manager

WHERE name_dep="Math";
```

5.

```
SELECT Students.age

FROM Students NATURAL JOIN Stu_Projs

      NATURAL JOIN Projects

      JOIN Teachers ON Teachers.nr_t=proj_manager

WHERE Teachers.name="Ana Matos";
```

6.

```
SELECT S1.name

FROM Students S1 NATURAL JOIN Departments

      JOIN Advises ON S1.nr_s=adviser

      JOIN Students S2 ON S2.nr_s=advised

WHERE name_dep="Economy" AND S2.course="Management";
```

7.

```
SELECT institution

FROM Projects NATURAL JOIN Participates

      NATURAL JOIN Teachers

WHERE area="Econometrics";
```

8.

```
SELECT name_dep

FROM Departments NATURAL JOIN Works

      NATURAL JOIN Teachers

      NATURAL JOIN Participates

      NATURAL JOIN Projects

      JOIN Teachers T ON proj_manager=T.nr_t

WHERE T.name="Joao Costa";
```

9.

```
SELECT DISTINCT nr_t,Teachers.name

FROM Teachers NATURAL JOIN Stu_Projs

WHERE nr_s IN (

    SELECT nr_s

    FROM Students NATURAL JOIN Departments

    WHERE name_dep="Math"

);
```

10.

```
SELECT nr_s, name

FROM Students NATURAL JOIN Stu_Projs

    NATURAL JOIN Teachers

    NATURAL JOIN Works

    JOIN Departments ON Works.cod_dept=Departments.cod_dept

WHERE name_dep="chemistry"

    AND Students.cod_dept=(

        SELECT cod_dept FROM Departments

        WHERE name_dep="Physics");
```