5.2) SQL:

a) Find name and city of all persons who work for the company “MyComp” and earn less than 10000

```
SELECT distinct l.person_name, l.city 
FROM lives l, works w 
WHERE 
  (l.person_name = w.person_name) AND 
  (w.company_name = 'MyComp') AND 
  (w.salary < 10000)
```

b) Find the names of all persons, who don’t work for “MyComp”

```
SELECT distinct l.person_name
FROM lives l
WHERE NOT (l.person_name IN 
  (SELECT distinct w.person_name 
   FROM works w 
   WHERE 
     w.company_name= 'MyComp'))
```

c) Find the names of all persons, who live in a city that the company they are working for is not located in.

```
SELECT distinct l.person_name 
FROM lives l, works w 
WHERE 
  (l.person_name = w.person_name) AND 
  (l.city <> ALL (SELECT o.city 
                 FROM located o 
                 WHERE (o.company_name = w.company_name)) 
)
```

d) Find the names of all managers, whose company is not placed in Munich or Hamburg.

```
SELECT distinct b.manager_name 
FROM boss b 
WHERE 
  NOT EXISTS 
  (SELECT * FROM works w, located o 
   WHERE 
     (b.manager_name = w.person_name) AND 
     (o.company_name = w.company_name) AND 
     (o.city IN ('Munich', 'Hamburg'))
  )
```

e) Find the names of all companies that are located in exactly the same cities as “MyComp”

Remark:
1) The mustn’t be another location entry for the same company with a city where myComp has no location at
2) There mustn’t be a location of myComp that the listed company is not located in

```
SELECT distinct lo1.company_name 
FROM located lo1 
WHERE 
  NOT EXIST ( 
    SELECT * FROM located lo2 
    WHERE 
      (lo2.company_name = lo1.company_name) 
      AND NOT EXISTS ( 
        SELECT * FROM located myCompLocs 
        WHERE 
          (myCompLocs.company_name='MyComp') AND 
          (myCompLocs.city = lo2.city) 
      ) 
  ) 
AND 
  NOT EXIST ( 
    SELECT * FROM located myCompLocs 
    WHERE myCompLocs.company_name = 'MyComp' 
    AND NOT EXIST ( 
      SELECT * FROM located lo2 
      WHERE (lo1.company_name = lo2.company_name) AND 
      (lo2.city = MyCompLocs.city) 
    ) 
  )
```