**Laboratory work 1**

1. Find the ID and name of each employee who works for “BigBank

П𝐼𝐷,𝑛𝑎𝑚𝑒(𝛿𝑐𝑜𝑚𝑝𝑎𝑛𝑦\_𝑛𝑎𝑚𝑒=Big Bank = (𝑤𝑜𝑟𝑘𝑠))

2. Find the ID, name, and city of residence of each employee who works for “BigBank”.

П𝐼𝐷,𝑛𝑎𝑚𝑒,𝑐𝑖𝑡𝑦(𝛿𝑐𝑜𝑚𝑝𝑎𝑛𝑦 \_𝑛𝑎𝑚𝑒="Big Bank" (𝑒𝑚𝑝𝑙𝑜𝑦𝑒𝑒 ⋈𝑒𝑚𝑝𝑙𝑜𝑦𝑒𝑒.𝑝𝑒𝑟𝑠𝑜𝑛\_𝑛𝑎𝑚𝑒= 𝑤𝑜𝑟𝑘𝑠)) 𝑤𝑜𝑟𝑘𝑠.𝑝𝑒𝑟𝑠𝑜𝑛\_𝑛𝑎𝑚𝑒

3. Find the ID, name, street address, and city of residence of each employee who works for “BigBank” and earns more than $10000.

П𝐼𝐷,𝑛𝑎𝑚𝑒,𝑠𝑡𝑟𝑒𝑒𝑡,𝑐𝑖𝑡𝑦(𝛿𝑐𝑜𝑚𝑝𝑎𝑛𝑦 \_𝑛𝑎𝑚𝑒="Big Bank" ⋀ salary > 10000 (𝑒𝑚𝑝𝑙𝑜𝑦𝑒𝑒 ⋈𝑒𝑚𝑝𝑙𝑜𝑦𝑒𝑒.𝑝𝑒𝑟𝑠𝑜𝑛\_𝑛𝑎𝑚𝑒= 𝑤𝑜𝑟𝑘𝑠)) 𝑤𝑜𝑟𝑘𝑠.𝑝𝑒𝑟𝑠𝑜𝑛\_𝑛𝑎𝑚𝑒

4. Find the ID and name of each employee in this database who lives in the same city as the company for which she or he works.

П𝐼𝐷,𝑛𝑎𝑚𝑒,𝑠𝑡𝑟𝑒𝑒𝑡(𝛿𝑐𝑜𝑚𝑝𝑎𝑛𝑦 .𝑐𝑖𝑡𝑦=𝑒𝑚𝑝𝑙𝑜𝑦𝑒𝑒.𝑐𝑖𝑡𝑦 (𝑒𝑚𝑝𝑙𝑜𝑦𝑒𝑒 ⋈𝑒𝑚𝑝𝑙𝑜𝑦𝑒𝑒.𝑝𝑒𝑟𝑠𝑜𝑛\_𝑛𝑎𝑚𝑒= 𝑤𝑜𝑟𝑘𝑠 ⋈ 𝑤𝑜𝑟𝑘𝑠.𝑐𝑜𝑚𝑝𝑎𝑛𝑦\_𝑛𝑎𝑚𝑒= 𝑤𝑜𝑟𝑘𝑠.𝑝𝑒𝑟𝑠𝑜𝑛\_𝑛𝑎𝑚𝑒 𝑐𝑜𝑚𝑝𝑎𝑛𝑦.𝑐𝑜𝑚𝑝𝑎𝑛𝑦\_𝑛𝑎𝑚𝑒

= 𝑐𝑜𝑚𝑝𝑎𝑛𝑦))

2.1 Find the ID and name of each employee who does not work for “ BigBank”.

П𝐼𝐷,𝑛𝑎𝑚𝑒(𝛿𝑐𝑜𝑚𝑝𝑎𝑛𝑦 \_ 𝑛𝑎𝑚𝑒¬="Big Bank" (𝑒𝑚𝑝𝑙𝑜𝑦𝑒𝑒 𝑋 𝑤𝑜𝑟𝑘𝑠))

2.2 Find the ID and name of each employee who earns at least as much as every employee in the database

П𝐼𝐷,𝑛𝑎𝑚𝑒(𝛿𝑠𝑎𝑙𝑎𝑟𝑦>=𝑎𝑣𝑔(𝑠𝑎𝑙𝑎𝑟𝑦) (𝑒𝑚𝑝𝑙𝑜𝑦𝑒𝑒 𝑋 𝑤𝑜𝑟𝑘𝑠))

3. if we insert smth else in dept\_name we get violation of foreign keys. If we delete smth in primary keys it will be also violation.  
4. For employee: ID, {ID,NAME};  
Works: ID, {ID, company\_name};

Company : Company\_name