TP Final

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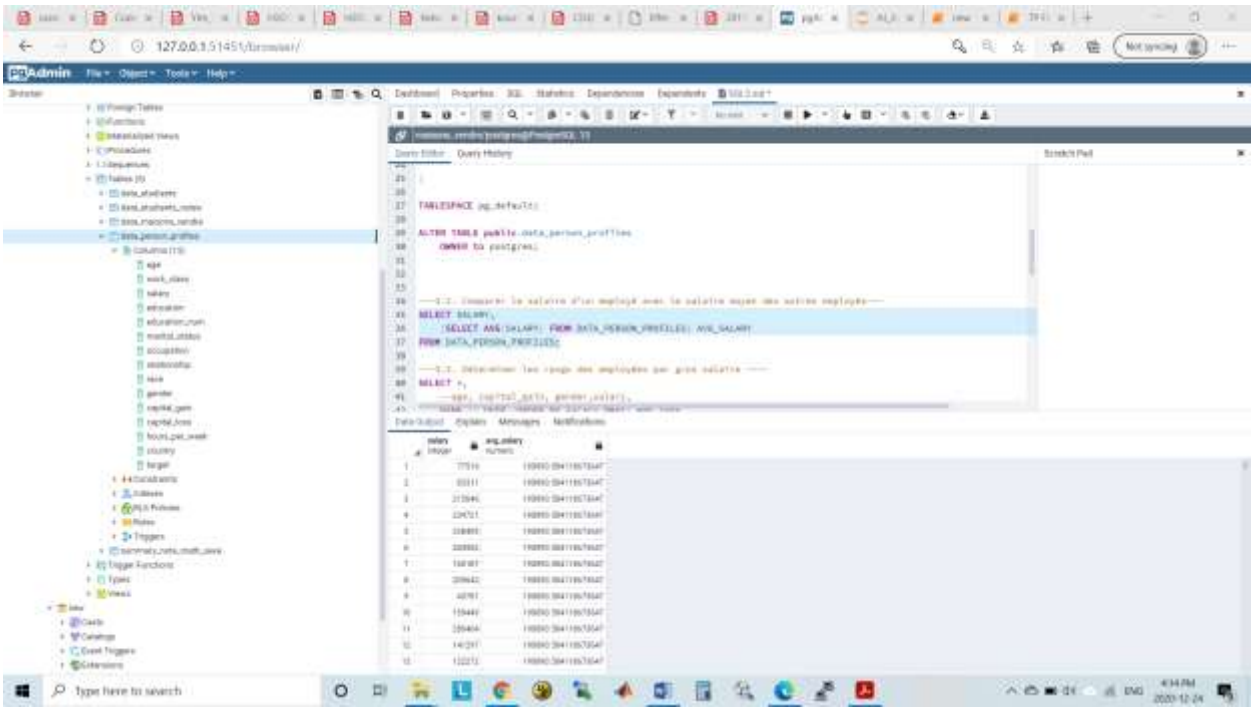
---3. SQL

----3.1. Charger le jeu de donnees « data_person_profiles.txt ».---

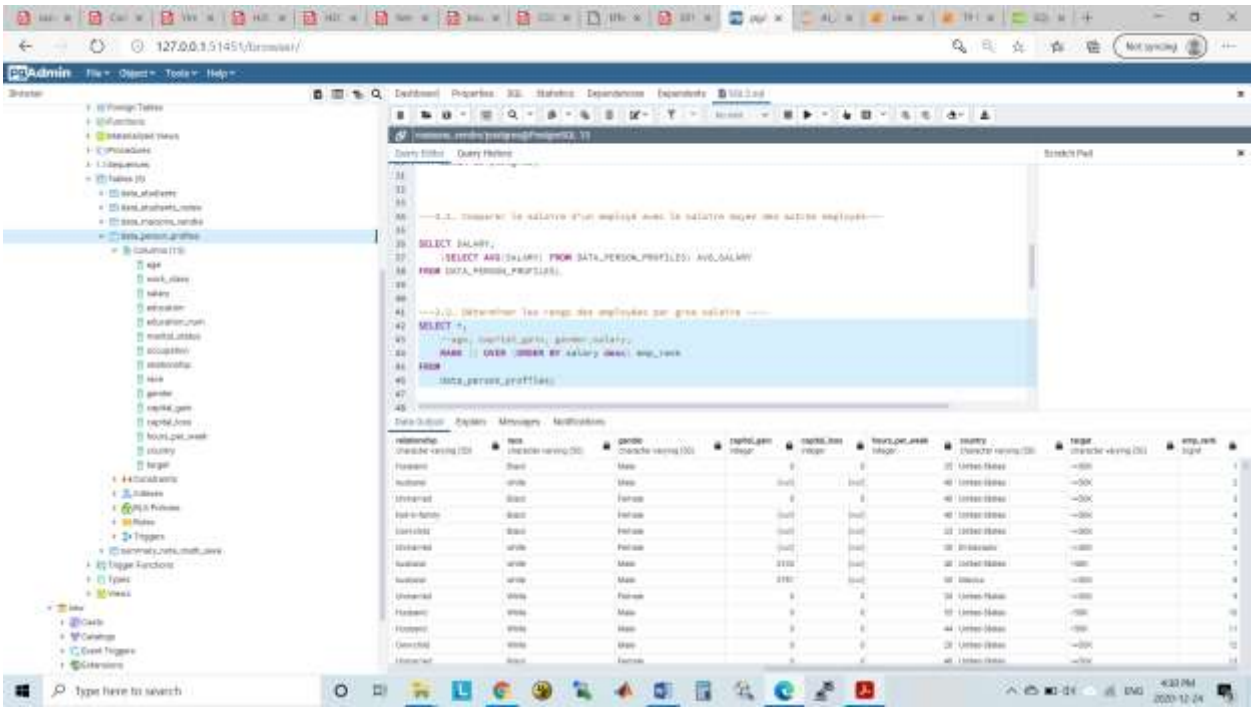
```
CREATE TABLE public.data_person_profiles
(
age integer,
work_class          varchar(50),
salary              integer,
education           varchar(50),
education_num       integer,
marital_status      varchar(50),
occupation          varchar(50),
relationship        varchar(50),
race                varchar(50),
gender              varchar(50),
capital_gain        integer,
capital_loss        integer,
hours_per_week      integer,
country             varchar(50),
target              varchar(50)


)

TABLESPACE pg_default;

ALTER TABLE public.data_person_profiles
    OWNER to postgres;
```

---3.2. Comparer le salaire d'un employee avec le salaire moyen des autres employees---

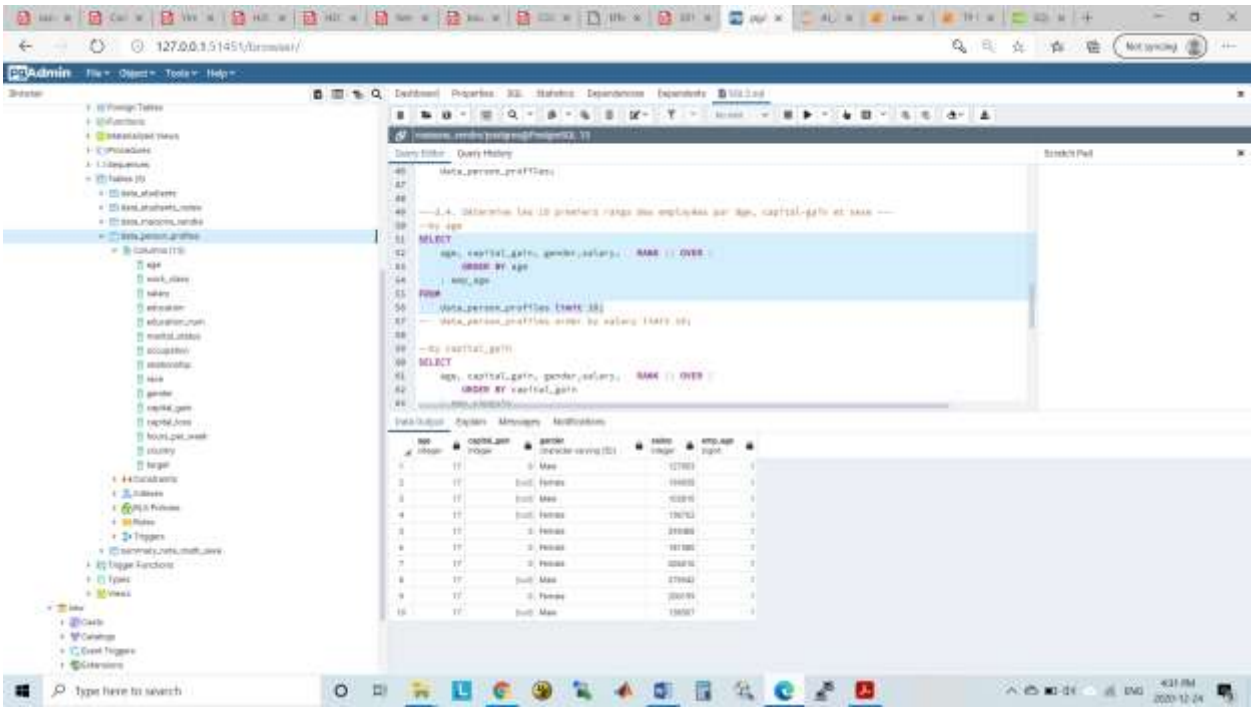
```
SELECT SALARY,
      (SELECT AVG(SALARY) FROM DATA_PERSON_PROFILES) AVG_SALARY
FROM DATA_PERSON_PROFILES;
```



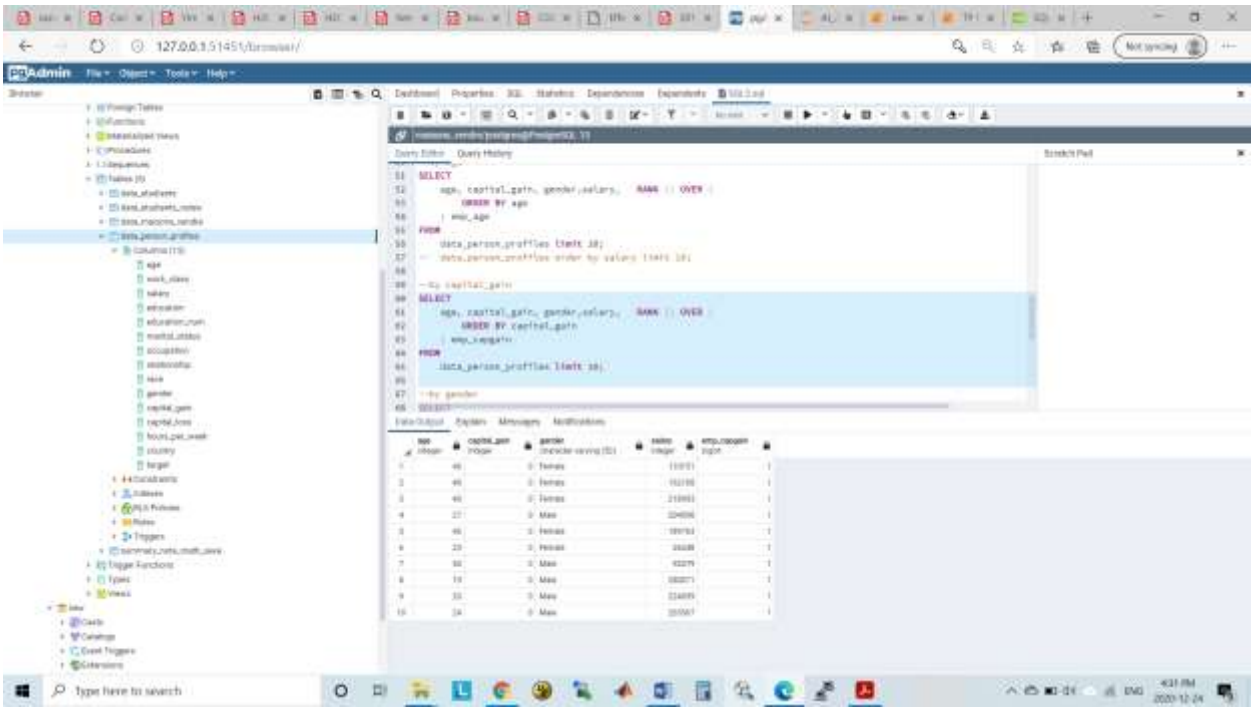
```
---3.3. Determiner les rangs des employees par gros salaire ----

SELECT *,
      RANK () OVER (ORDER BY salary desc) emp_rank
FROM
      data_person_profiles;
```



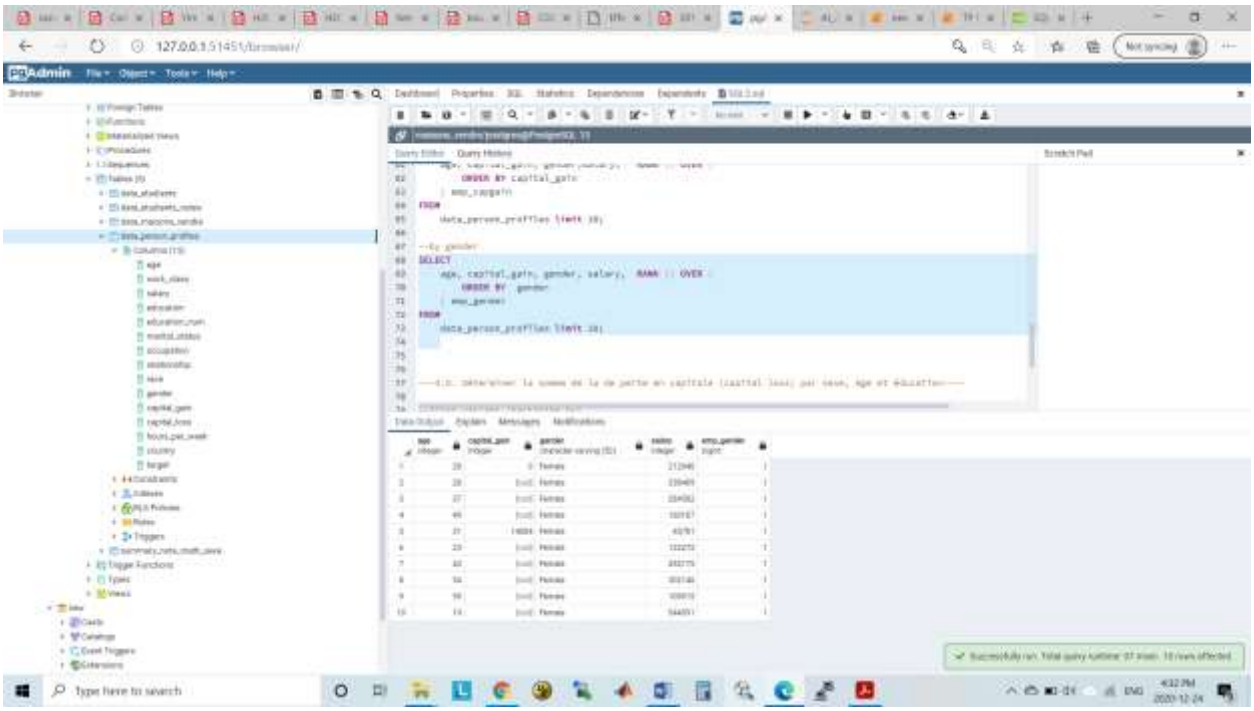
```
---3.4. Determine les 10 premiers rangs des employees par age,
capital-gain et sexe ---

--by age
SELECT
      age, capital_gain, gender,salary,      RANK () OVER (
            ORDER BY age
      ) emp_age
FROM
      data_person_profiles limit 10;
--    data_person_profiles order by salary limit 10;
```



```
--by capital_gain
SELECT
      age, capital_gain, gender,salary,      RANK () OVER (
            ORDER BY capital_gain
      ) emp_capgain
FROM
      data_person_profiles limit 10;
```



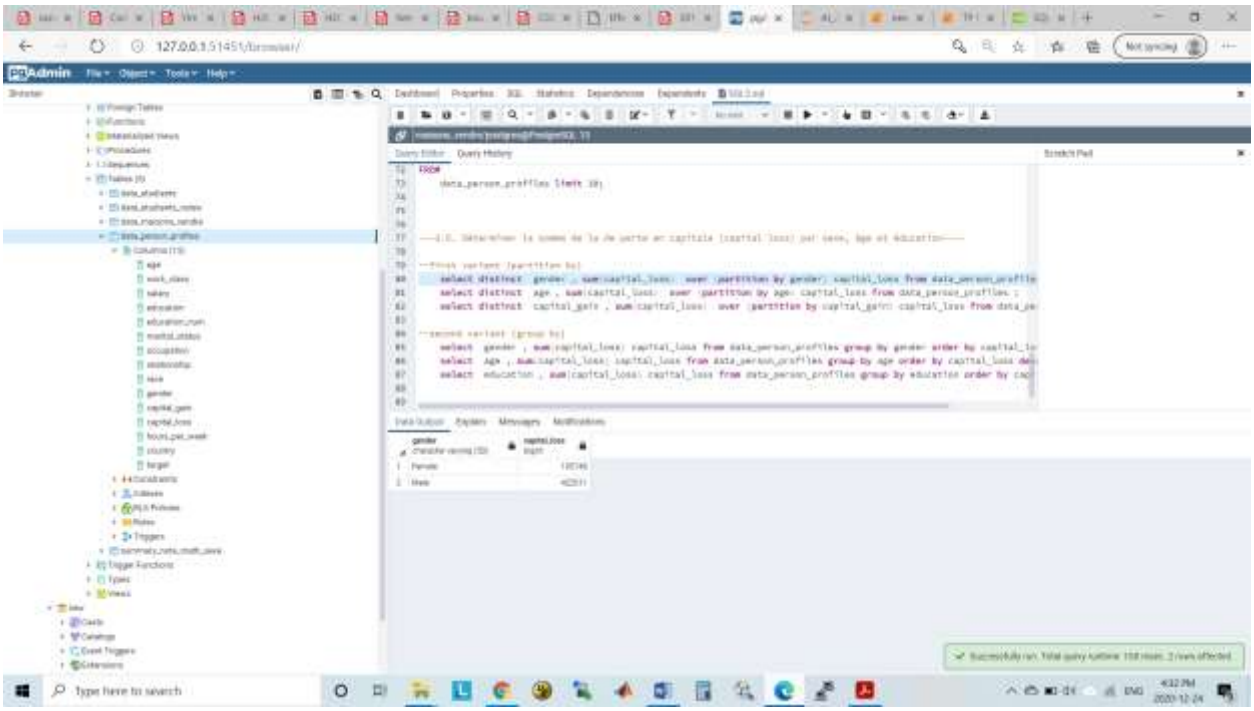
```
--by gender
SELECT
      age, capital_gain, gender, salary,     RANK () OVER (
            ORDER BY  gender
      ) emp_gender
FROM
      data_person_profiles limit 10;
```



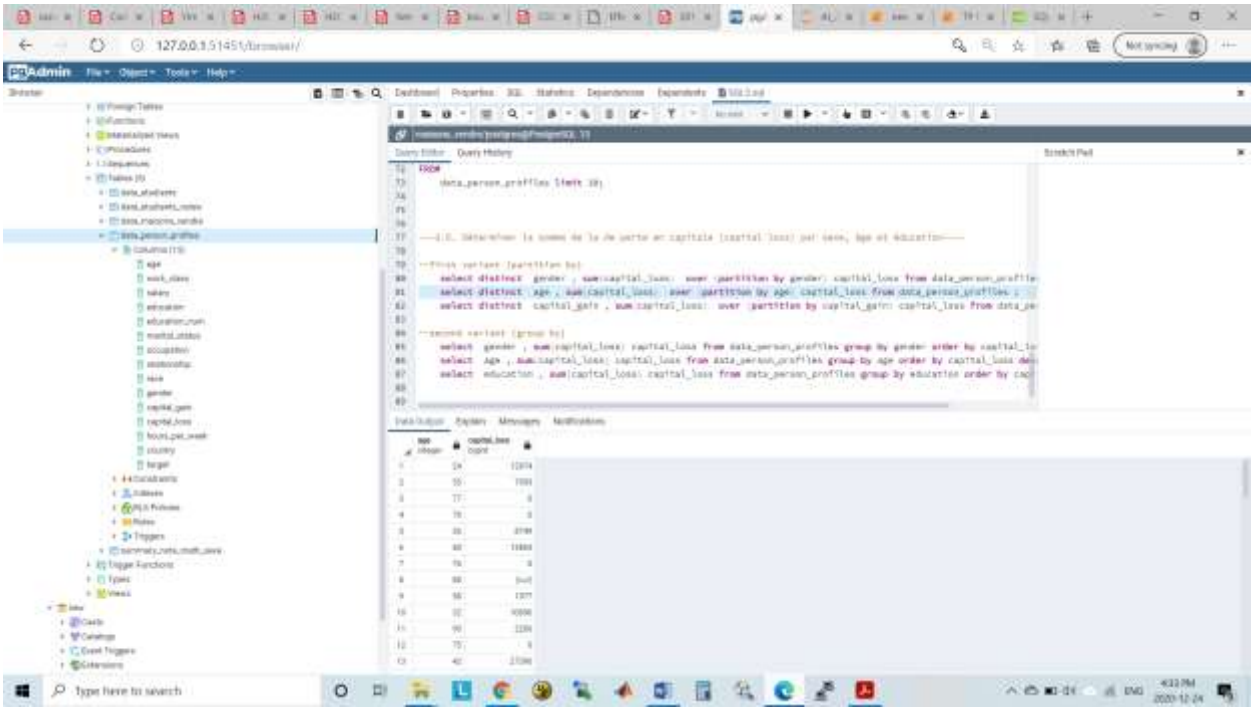
---3.5. Determiner la somme de la de perte en capitale (capital loss) par sexe, Age et Education----

--first variant (partition by)

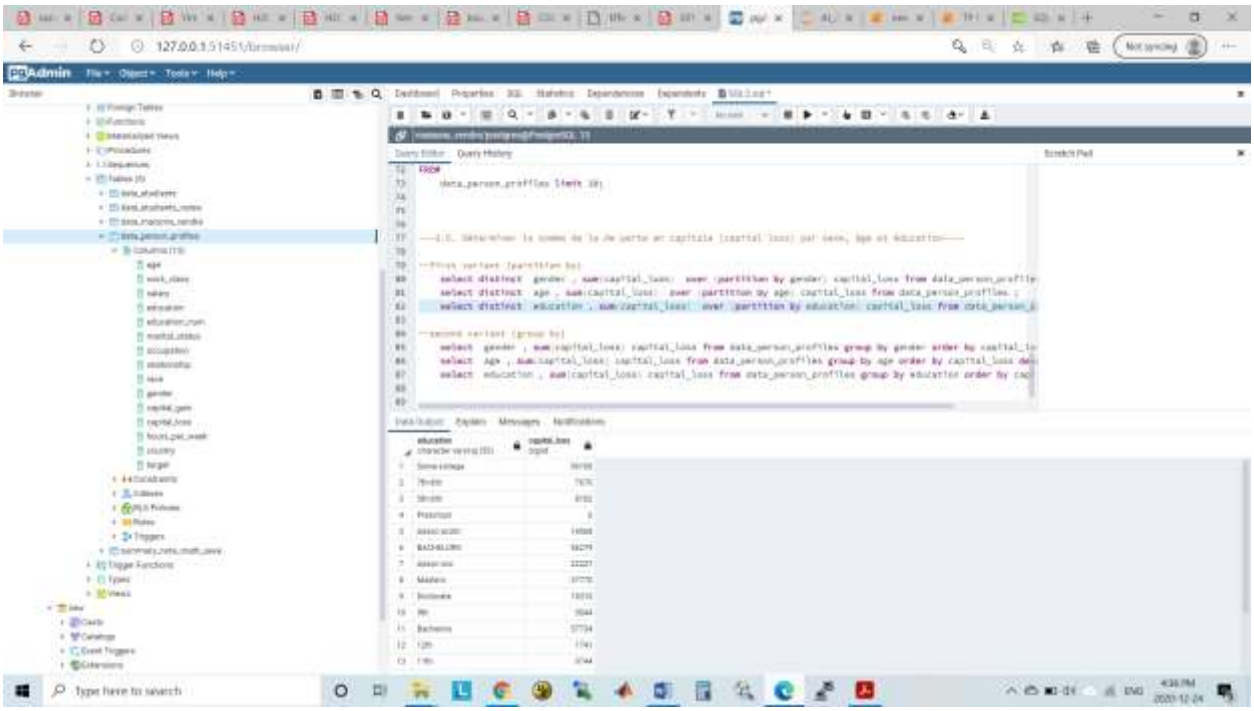
```
    select distinct  gender , sum(capital_loss)  over (partition by
gender) capital_loss from data_person_profiles ;
```



```
select distinct  age , sum(capital_loss)  over (partition by age) capital_loss from data_person_profiles ;
```



```
select distinct  education , sum(capital_loss)  over (partition by education) capital_loss from data_person_profiles  ;
```



```
--second variant (group by)
     select  gender , sum(capital_loss) capital_loss from
data_person_profiles group by gender order by capital_loss desc;;
    select  age , sum(capital_loss) capital_loss from
data_person_profiles group by age order by capital_loss desc;;
     select  education , sum(capital_loss) capital_loss from
data_person_profiles group by education order by capital_loss desc;
```