```
1
2
3
4
5
6   # use the dataset
7
8   use titanic;
9
10      -- use : The use keyword is used to set the data base as primary, in  which you are goingt o work on.
```

```
4
5
6   # show the record of table
7
8   select * from tbl_titanic;
9
10      -- Seelct : The Select is a DQL(Data Query Language) commange that helpd us to fetch the record form table.
11      -- * : The * symbol is used to fetch all (columns) record of the database.
12
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Fetch rows:

| PassengerId | Survived | Pclass | Name | Sex | Age | SibSp | Parch | Ticket | Fare | Cabin | Embarked |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 3 | Braund, Mr. Owen Harris | male | 22 | 1 | 0 | A/5 21171 | 7.25 | | S |
| 2 | 1 | 1 | Cumings, Mrs. John Bradley (Florence Briggs Th... | female | 38 | 1 | 0 | PC 17599 | 71.2833 | C85 | C |
| 3 | 1 | 3 | Heikkinen, Miss. Laina | female | 26 | 0 | 0 | STON/O2. 3101282 | 7.925 | | S |
| 4 | 1 | 1 | Futrelle, Mrs. Jacques Heath (Lily May Peel) | female | 35 | 1 | 0 | 113803 | 53.1 | C123 | S |
| 5 | 0 | 3 | Allen, Mr. William Henry | male | 35 | 0 | 0 | 373450 | 8.05 | | S |
| 7 | 0 | 1 | McCarthy, Mr. Timothy J | male | 54 | 0 | 0 | 17463 | 51.8625 | E46 | S |
| 8 | 0 | 3 | Palsson, Master. Gosta Leonard | male | 2 | 3 | 1 | 349909 | 21.075 | | S |
| 9 | 1 | 3 | Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg) | female | 27 | 0 | 2 | 347742 | 11.1333 | | S |

tbl_titanic 1

```
6      # SHow the column List of Table
7
8  •   SHOW COLUMNS FROM tbl_titanic;
9
10         -- here we are using The Show Column to get the list of complte details of column of Tables
11
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| Field | Type | Null | Key | Default | Extra |
|---|---|---|---|---|---|
| PassengerId | int | NO | PRI | NULL | |
| Survived | int | NO | | NULL | |
| Pclass | int | YES | | NULL | |
| Name | text | YES | | NULL | |
| Sex | text | YES | | NULL | |
| Age | int | YES | | NULL | |
| SibSp | int | YES | | NULL | |
| Parch | int | YES | | NULL | |
| Ticket | text | YES | | NULL | |
| Fare | double | YES | | NULL | |
| Cabin | text | YES | | NULL | |
| Embarked | text | YES | | NULL | |

```
1
2   # Set the Passenger ID as Primary Key
3
4   alter table tbl_titanic
5   add constraint primary key(PassengerId);
6
7       -- Here We have used Alter Statement :
8       -- Alter key is ued to modifiy the defination of table
9       -- here we are adding constraints , It is rule, we are setting the rule on PassengerId as Primary Key
10
```

```
4     # show first 10 record of table
5
6     select * from tbl_titanic Limit 10;
7
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Fetch rows:

| PassengerId | Survived | Pclass | Name | Sex | Age | SibSp | Parch | Ticket | Fare | Cabin | Embarked |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 3 | Braund, Mr. Owen Harris | male | 22 | 1 | 0 | A/5 21171 | 7.25 | | S |
| 2 | 1 | 1 | Cumings, Mrs. John Bradley (Florence Briggs Th... | female | 38 | 1 | 0 | PC 17599 | 71.2833 | C85 | C |
| 3 | 1 | 3 | Heikkinen, Miss. Laina | female | 26 | 0 | 0 | STON/O2. 3101282 | 7.925 | | S |
| 4 | 1 | 1 | Futrelle, Mrs. Jacques Heath (Lily May Peel) | female | 35 | 1 | 0 | 113803 | 53.1 | C123 | S |
| 5 | 0 | 3 | Allen, Mr. William Henry | male | 35 | 0 | 0 | 373450 | 8.05 | | S |
| 7 | 0 | 1 | McCarthy, Mr. Timothy J | male | 54 | 0 | 0 | 17463 | 51.8625 | E46 | S |
| 8 | 0 | 3 | Palsson, Master. Gosta Leonard | male | 2 | 3 | 1 | 349909 | 21.075 | | S |
| 9 | 1 | 3 | Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg) | female | 27 | 0 | 2 | 347742 | 11.1333 | | S |
| 10 | 1 | 2 | Nasser, Mrs. Nicholas (Adele Achem) | female | 14 | 1 | 0 | 237736 | 30.0708 | | C |
| 11 | 1 | 3 | Sandstrom, Miss. Marguerite Rut | female | 4 | 1 | 1 | PP 9549 | 16.7 | G6 | S |
| NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |

tbl_titanic 5

```sql

# Find the No of passenger who survived?

select count(*) as "pasenger_Survived" from tbl_titanic where survived = 1;

    -- Count() : The Count()  is a aggregate Method that returns the total No of Record in the Table/Coumn .
    -- Where : The where Keyword is used to filter the data based on the specified condition


```

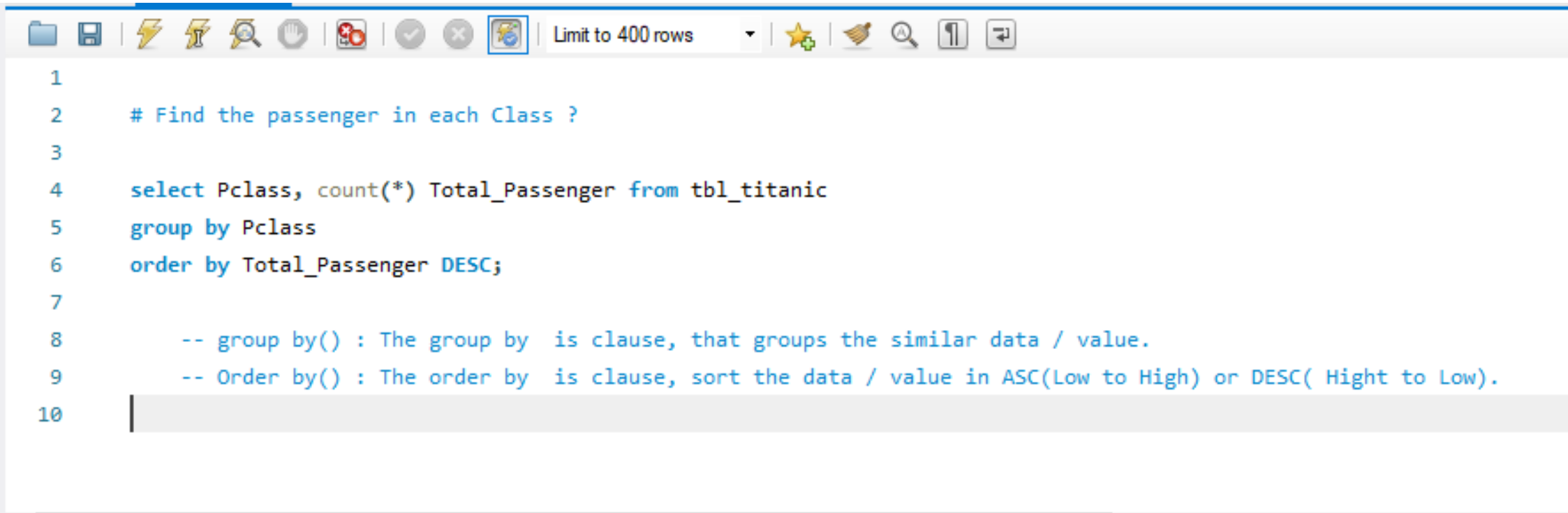
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| | pasenger_Survived |
|---|---|
| ▶ | 290 |

```sql

    # Find the Average Age of passenger ?

    select avg(Age) from tbl_titanic;

        -- AVG() : The AVG()  is a aggregate Method that returns the Average of value .

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| | avg(Age) |
|---|---|
| ▶ | 29.7129 |




| Pclass | Total_Passenger |
|---|---|
| 3 | 355 |
| 1 | 186 |
| 2 | 173 |

```
1
2   # Find the First 10 record of the dataset sorted by passenger class in highest to lowest  ?
3
4   select * from tbl_titanic
5   order by Pclass DESC
6   limit 10;
7
8       -- Order by() : The order by  is clause, sort the data / value in ASC(Low to High) or DESC( Hight to Low).
9       -- limit : The Limit keyword is use to show selected No. of record form table.
10
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Fetch rows:

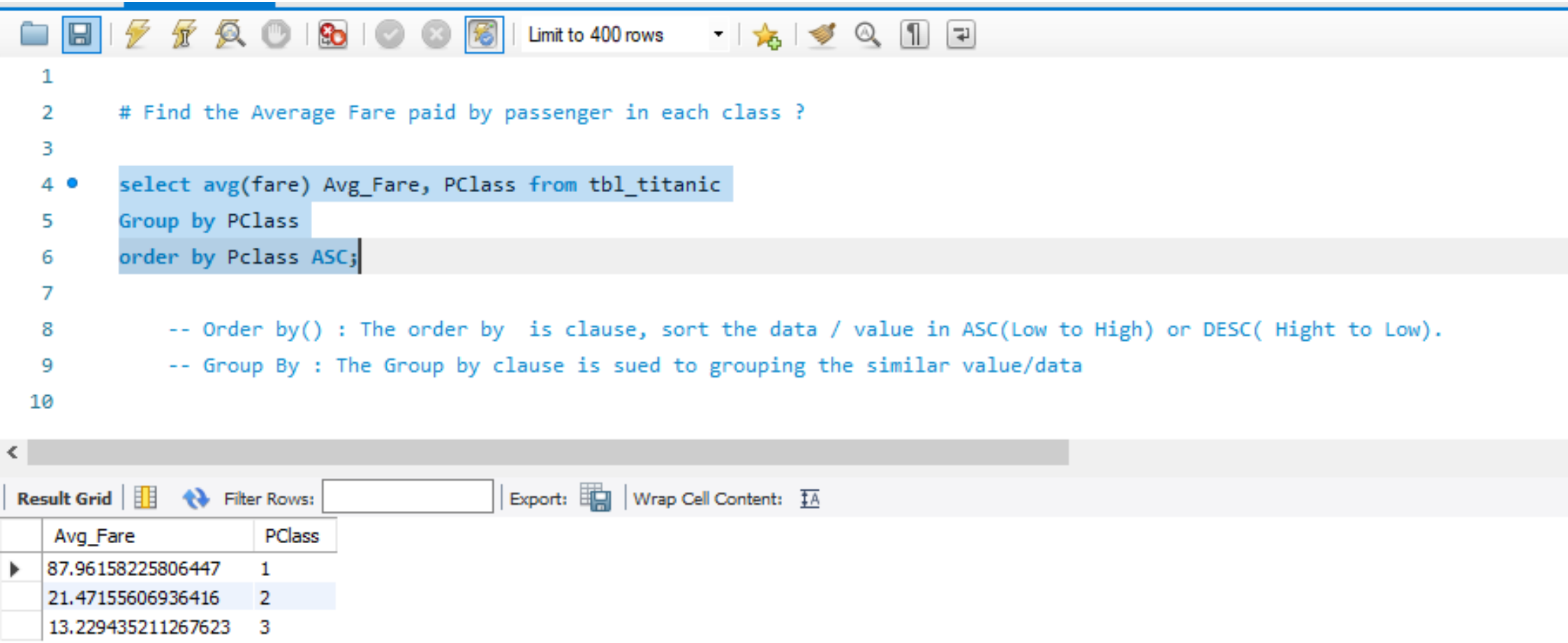
| PassengerId | Survived | Pclass | Name | Sex | Age | SibSp | Parch | Ticket | Fare | Cabin | Embarked |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 3 | Braund, Mr. Owen Harris | male | 22 | 1 | 0 | A/5 21171 | 7.25 | | S |
| 443 | 0 | 3 | Petterson, Mr. Johan Emil | male | 25 | 1 | 0 | 347076 | 7.775 | | S |
| 3 | 1 | 3 | Heikkinen, Miss. Laina | female | 26 | 0 | 0 | STON/O2. 3101282 | 7.925 | | S |
| 891 | 0 | 3 | Dooley, Mr. Patrick | male | 32 | 0 | 0 | 370376 | 7.75 | | Q |
| 5 | 0 | 3 | Allen, Mr. William Henry | male | 35 | 0 | 0 | 373450 | 8.05 | | S |
| 785 | 0 | 3 | Ali, Mr. William | male | 25 | 0 | 0 | SOTON/O.Q. 3101312 | 7.05 | | S |
| 8 | 0 | 3 | Palsson, Master. Gosta Leonard | male | 2 | 3 | 1 | 349909 | 21.075 | | S |
| 9 | 1 | 3 | Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg) | female | 27 | 0 | 2 | 347742 | 11.1333 | | S |
| 449 | 1 | 3 | Baclini, Miss. Marie Catherine | female | 5 | 2 | 1 | 2666 | 19.2583 | | C |
| 11 | 1 | 3 | Sandstrom, Miss. Marguerite Rut | female | 4 | 1 | 1 | PP 9549 | 16.7 | G6 | S |
| NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |

tbl_titanic 10


```
1
2    # Find the No of passenger in each class sorted by class in ascending order?
3    select count(*) Total_Passenger, PClass from tbl_titanic
4    Group by PClass
5    order by Pclass ASC;
6
7        -- Order by() : The order by  is clause, sort the data / value in ASC(Low to High) or DESC( Hight to Low).
8        -- Group By : The Group by clause is sued to grouping the similar value/data
9
10
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| | Total_Passenger | PClass |
|---|---|---|
| ▶ | 186 | 1 |
| | 173 | 2 |
| | 355 | 3 |


Limit to 400 rows
1
2 # Find the Average Fare paid by passenger in each class ?
3
4 select avg(fare) Avg_Fare, PClass from tbl_titanic
5 Group by PClass
6 order by Pclass ASC;
7
8 -- Order by() : The order by is clause, sort the data / value in ASC(Low to High) or DESC( Hight to Low).
9 -- Group By : The Group by clause is sued to grouping the similar value/data
10
Result Grid
Filter Rows:
Export:
Wrap Cell Content:
Avg_Fare
PClass
87.96158225806447
1
21.47155606936416
2
13.229435211267623
3

```sql

# Find the Passenger Name who paid the Highest Fare  ?

select Name, Fare from tbl_titanic
where fare = (
                select Max(fare) Highest_fare from tbl_titanic
             );

    -- Here we are using here the the Query inside the Query, That is called the Subquery
    -- The outer Query result is depend on the inner Query
    --  Here we are finding the max/ highest fare from the table, then we we extracting thr result on the basis on MAX fare

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| Name | Fare |
|---|---|
| Ward, Miss. Anna | 512.3292 |
| Cardeza, Mr. Thomas Drake Martinez | 512.3292 |
| Lesurer, Mr. Gustave J | 512.3292 |

```sql
# Find the Passenger  who had Highest Age Among the survivors  ?

select Name, Age as Highest_Age from tbl_titanic
where age = (
            select Max(age) from tbl_titanic where survived = 1
            )
and survived = 1;

    -- Here we are using here the the Query inside the Query, That is called the Subquery
    -- The outer Query result is depend on the inner Query
    -- Here we are finding the max/ highest AGE from the table, then we we extracting thr result on the basis on MAX AGE
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| Name | Highest_Age |
|---|---|
| Barkworth, Mr. Algernon Henry Wilson | 80 |

```sql
# Find the No of Passenger  who paid more than agerage fare  ?

select Count(*)
from tbl_titanic
where fare > (
                select avg(fare) from tbl_titanic
            );

        -- Here we are using here the the Query inside the Query, That is called the Subquery
        -- The outer Query result is depend on the inner Query
        -- Here we are finding the Avg/ mean Fare from the table, then we we extracting the Total Count where Fare is grather that Avg Fare.
```

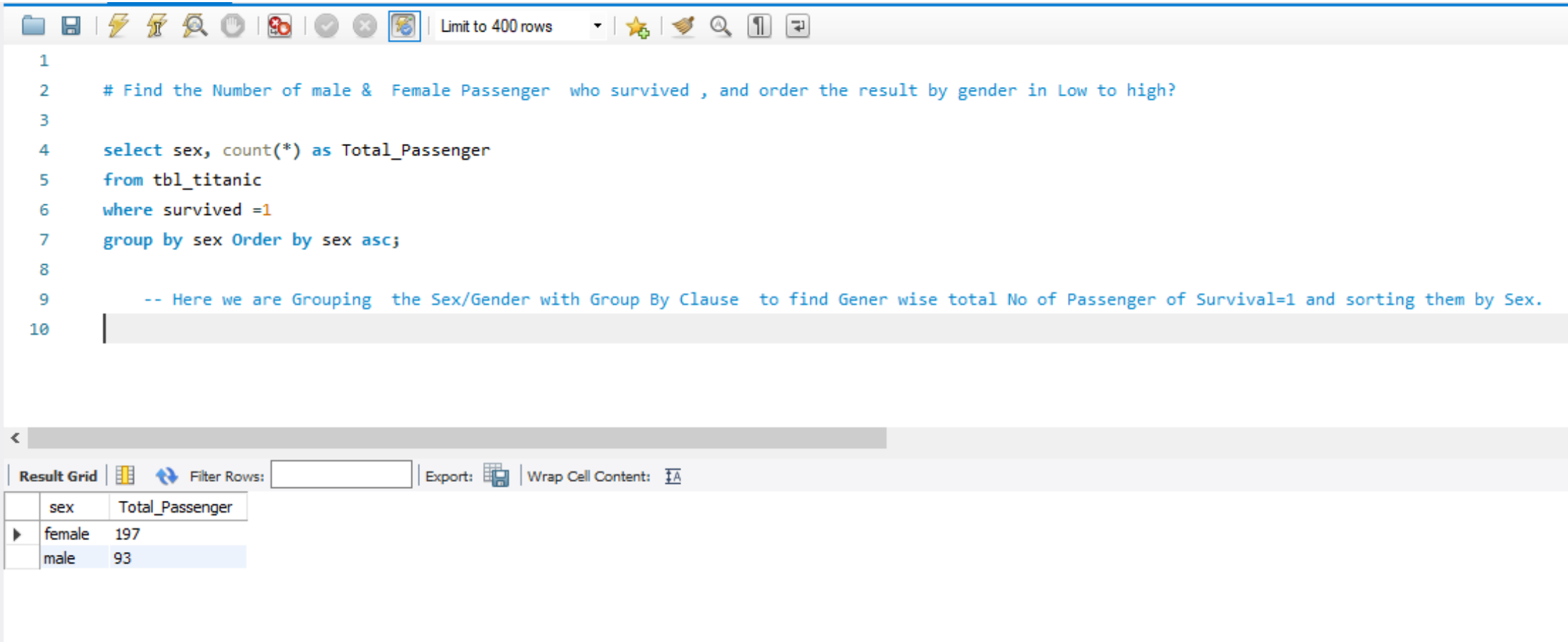
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| Count(*) |
| --- |
| 172 |

```sql

# Find the Name of Passenger  who had the most parents or child on board more than agerage fare  ?

select Name, Parch
from tbl_titanic
where Parch = (
                select Max(parch) from tbl_titanic
            );
    -- Here we are using here the the Query inside the Query, That is called the Subquery
    -- The outer Query result is depend on the inner Query
    -- Here we are finding the MAX/ highest Parch from the table, then we we extracting the result of that passenger who has Maxium no of child.

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

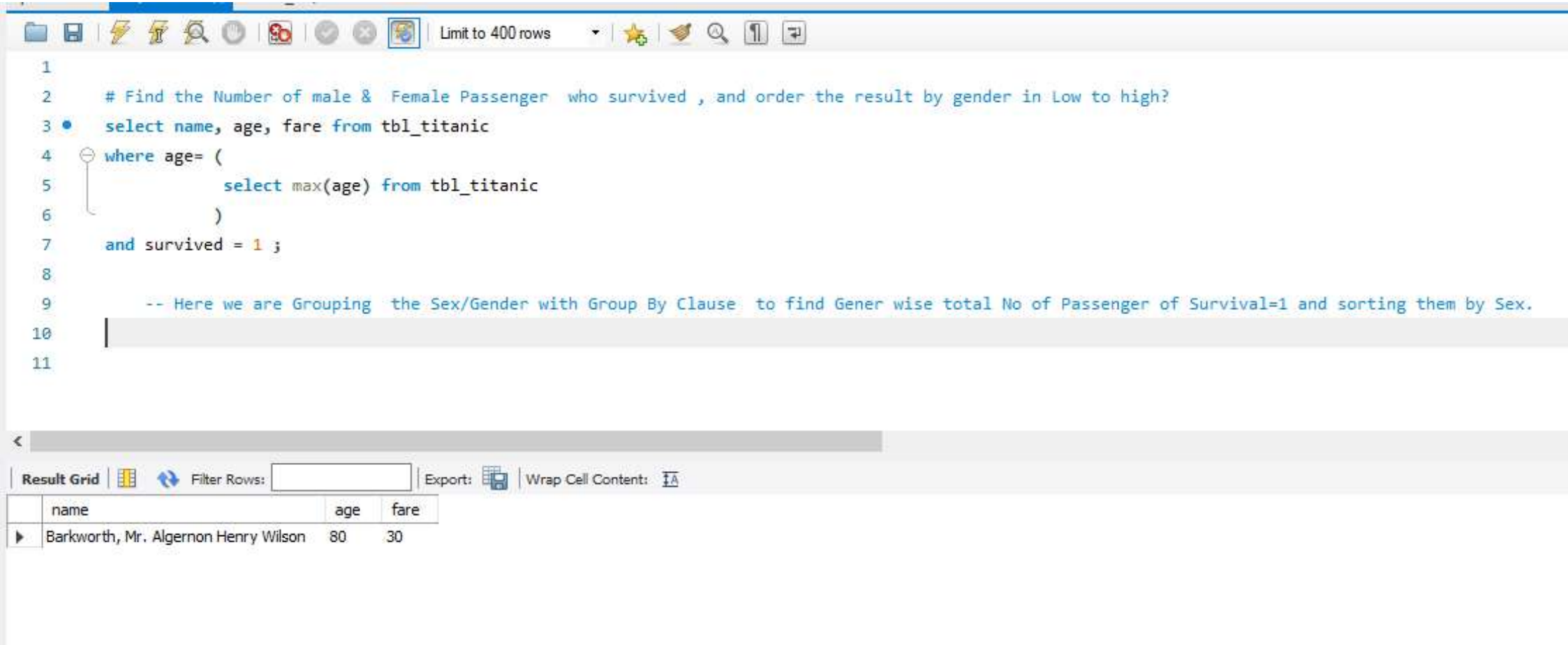
| Name | Parch |
|---|---|
| Goodwin, Mrs. Frederick (Augusta Tyler) | 6 |



```
1
2   # Find the Number of male &  Female Passenger  who survived , and order the result by gender in Low to high?
3
4   select sex, count(*) as Total_Passenger
5   from tbl_titanic
6   where survived =1
7   group by sex Order by sex asc;
8
9       -- Here we are Grouping  the Sex/Gender with Group By Clause  to find Gener wise total No of Passenger of Survival=1 and sorting them by Sex.
10
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| sex | Total_Passenger |
|---|---|
| female | 197 |
| male | 93 |



```
1
2    # Find the Number of male &  Female Passenger  who survived , and order the result by gender in Low to high?
3    select name, age, fare from tbl_titanic
4    where age= (
5                select max(age) from tbl_titanic
6               )
7    and survived = 1 ;
8
9        -- Here we are Grouping  the Sex/Gender with Group By Clause  to find Gener wise total No of Passenger of Survival=1 and sorting them by Sex.
10
11
```

Limit to 400 rows

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

| name | age | fare |
|---|---|---|
| Barkworth, Mr. Algernon Henry Wilson | 80 | 30 |

```sql

# Find the name & age  of youngest Female Passenger  who survived in third class?
select name, Age  from tbl_titanic
where sex = 'female'
and Pclass =3
and survived = 1 and
age = (
        select min(age) from tbl_titanic
        where sex = 'female'
        and Pclass =3
        and survived = 1
        );
 -- Here we are using SubQuery to find the the Min Age of Female passenger who has survived and
 -- then we are fetchthing the result on SubQuery to extract the Name , AGE of Female Passenger.

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

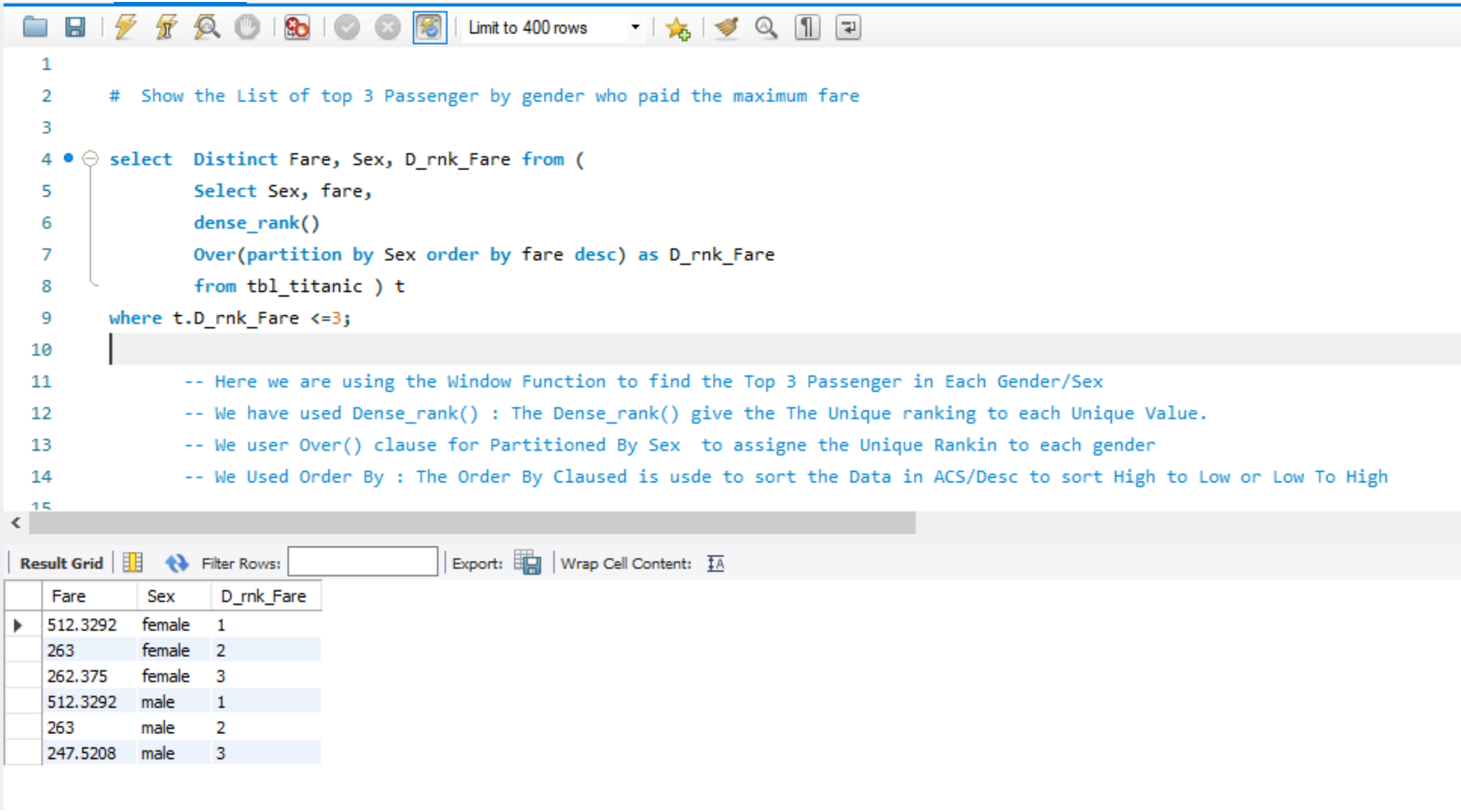
| | name | age | fare |
|---|---|---|---|
| ▶ | Barkworth, Mr. Algernon Henry Wilson | 80 | 30 |

```sql
# Select All passenger   who traveled in Cabin that was not shared by other Passenger?

Select * from tbl_titanic
where cabin not in
    (
        select cabin from tbl_titanic
        group by Cabin
        having count(*) > 1
    );

 -- Here on the basis of SubQuery we are extracting in the Main Query where Cabin is not shared with other Passenger with NOT IN o
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

| PassengerId | Survived | Pclass | Name | Sex | Age | SibSp | Parch | Ticket | Fare | Cabin | Embarked |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 1 | 1 | Cumings, Mrs. John Bradley (Florence Briggs Th... | female | 38 | 1 | 0 | PC 17599 | 71.2833 | C85 | C |
| 7 | 0 | 1 | McCarthy, Mr. Timothy J | male | 54 | 0 | 0 | 17463 | 51.8625 | E46 | S |
| 12 | 1 | 1 | Bonnell, Miss. Elizabeth | female | 58 | 0 | 0 | 113783 | 26.55 | C103 | S |
| 22 | 1 | 2 | Beesley, Mr. Lawrence | male | 34 | 0 | 0 | 248698 | 13 | D56 | S |
| 24 | 1 | 1 | Sloper, Mr. William Thompson | male | 28 | 0 | 0 | 113788 | 35.5 | A6 | S |
| 55 | 0 | 1 | Ostby, Mr. Engelhart Cornelius | male | 65 | 0 | 1 | 113509 | 61.9792 | B30 | C |
| 93 | 0 | 1 | Chaffee, Mr. Herbert Fuller | male | 46 | 1 | 0 | W.E.P. 5734 | 61.175 | E31 | S |
| 97 | 0 | 1 | Goldschmidt, Mr. George B | male | 71 | 0 | 0 | PC 17754 | 34.6542 | A5 | C |
| 98 | 1 | 1 | Greenfield, Mr. William Bertram | male | 23 | 0 | 1 | PC 17759 | 63.3583 | D10 D12 | C |
| 111 | 0 | 1 | Porter, Mr. Walter Chamberlain | male | 47 | 0 | 0 | 110465 | 52 | C110 | S |
| 137 | 1 | 1 | Newsom, Miss. Helen Monypeny | female | 19 | 0 | 2 | 11752 | 26.2833 | D47 | S |

tbl_titanic 20


Limit to 400 rows
1
2 # Show the List of top 3 Passenger by gender who paid the maximum fare
3
4 select Distinct Fare, Sex, D_rnk_Fare from (
5 Select Sex, fare,
6 dense_rank()
7 Over(partition by Sex order by fare desc) as D_rnk_Fare
8 from tbl_titanic ) t
9 where t.D_rnk_Fare <=3;
10
11 -- Here we are using the Window Function to find the Top 3 Passenger in Each Gender/Sex
12 -- We have used Dense_rank() : The Dense_rank() give the The Unique ranking to each Unique Value.
13 -- We user Over() clause for Partitioned By Sex to assigne the Unique Rankin to each gender
14 -- We Used Order By : The Order By Claused is usde to sort the Data in ACS/Desc to sort High to Low or Low To High
Result Grid
Filter Rows:
Export:
Wrap Cell Content:
Fare Sex D_rnk_Fare
512.3292 female 1
263 female 2
262.375 female 3
512.3292 male 1
263 male 2
247.5208 male 3

```
1
2
3
4
5   # Create the database
6
7   Create database titanic ;
8
9       -- Create is a DDL(Data Defination Language) command , that help us to create a structure in RDMBS.
```