Answer Sheet - SQL

Name : Kirankumar R G

Phone No. : 8497890044

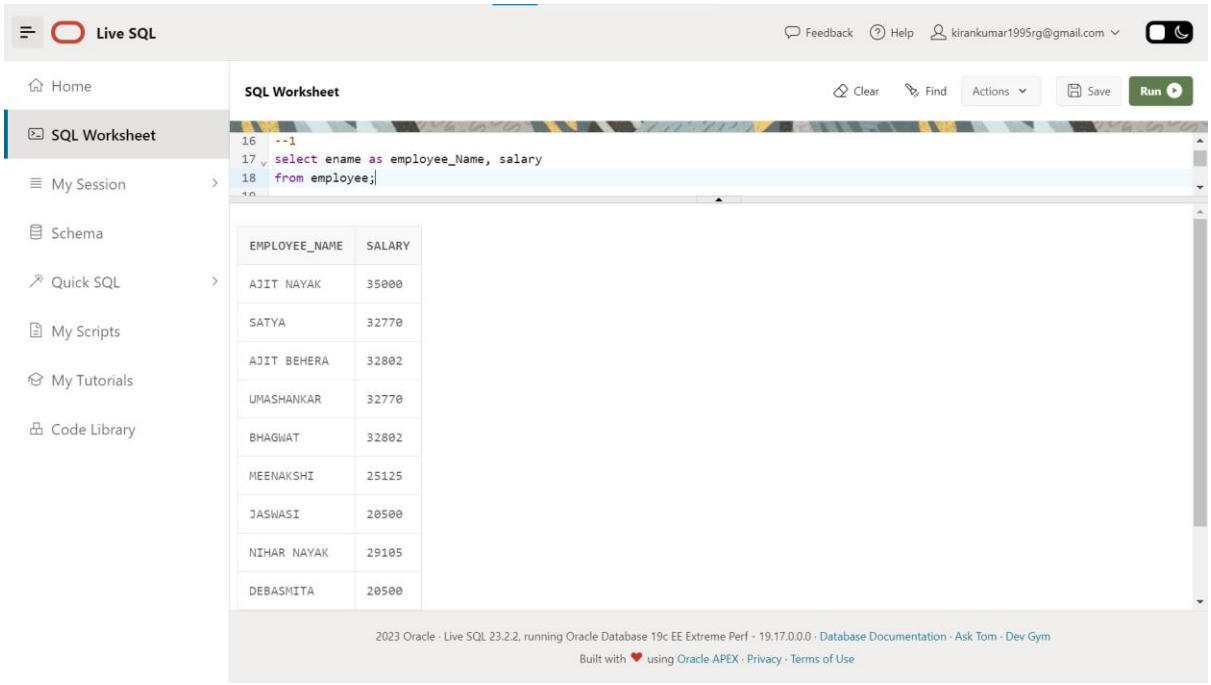
Email : kirankumar1995rg@gmail.com

Major Question 1

A) List the salary of all the employees.

```
select ename as employees_Name, salary
from employee;
```

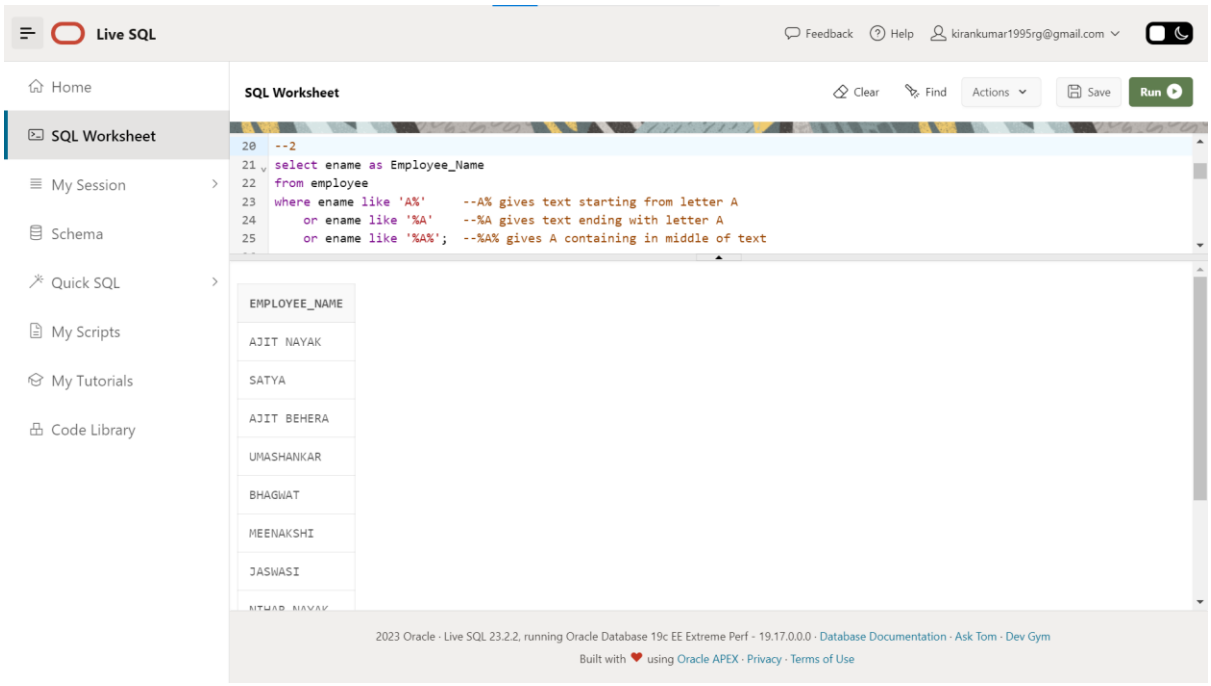
Insert Image-



B) Display the names of all employees with any “A” at any place of the name.

```
select ename as Employee_Name
from employee
where ename like 'A%'          --A% gives text starting from letter A
or ename like '%A'             --%A gives text ending with letter A
or ename like '%A%';           --%A% gives A containing in middle of text
```

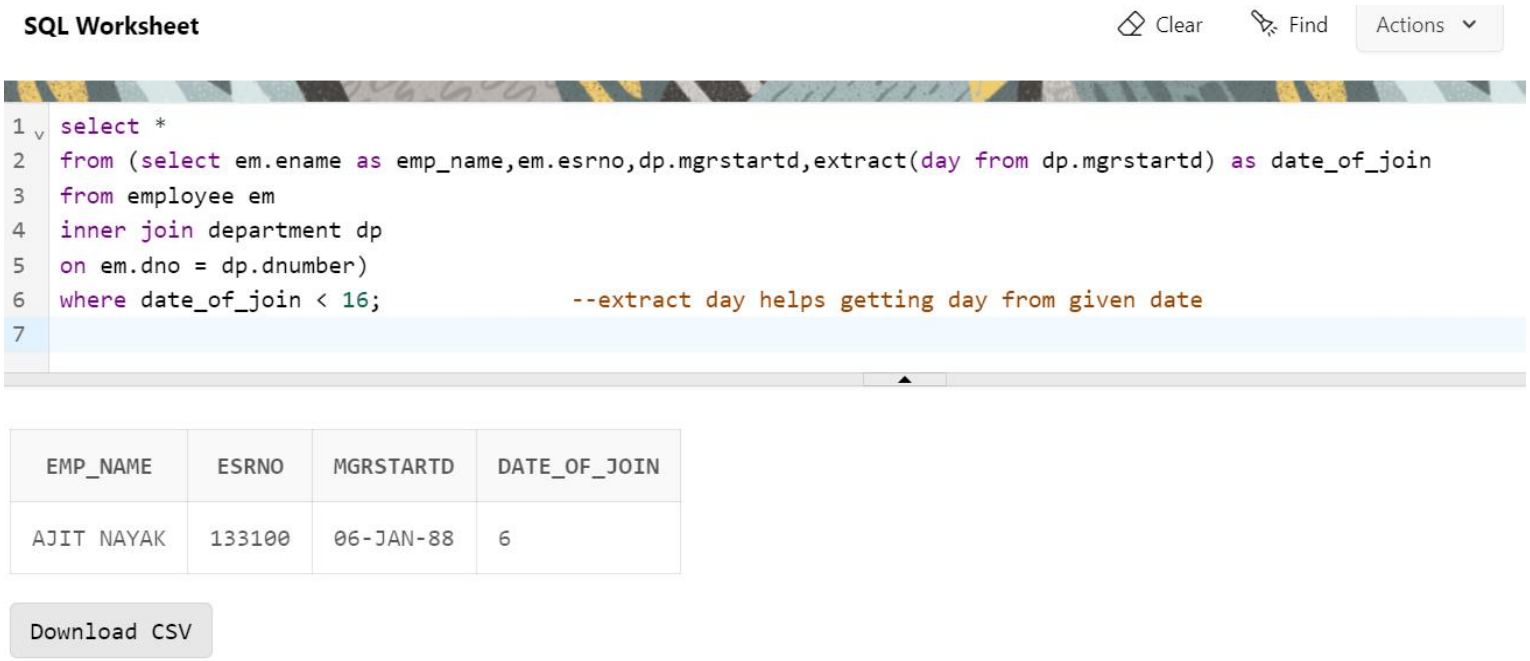
Insert Image –



C) Show all employees who were hired in the first half of the month (Before the 16th of the month).

```
select *
from (select em.ename as emp_name,em.esrno,dp.mgrstartd,extract(day from dp.mgrstartd) as date_of_join
from employee em
inner join department dp
on em.dno = dp.dnumber)
where date_of_join < 16;
```

Insert Image -



EMP_NAME	ESRNO	MGRSTARTD	DATE_OF_JOIN
AJIT NAYAK	133100	06-JAN-88	6

Download CSV

D) Display the name of all female employees.

```
select ename as employee_name, address,esrno
from employee
where sex='F';                                  --feltering done based on sex
```

Insert Image -

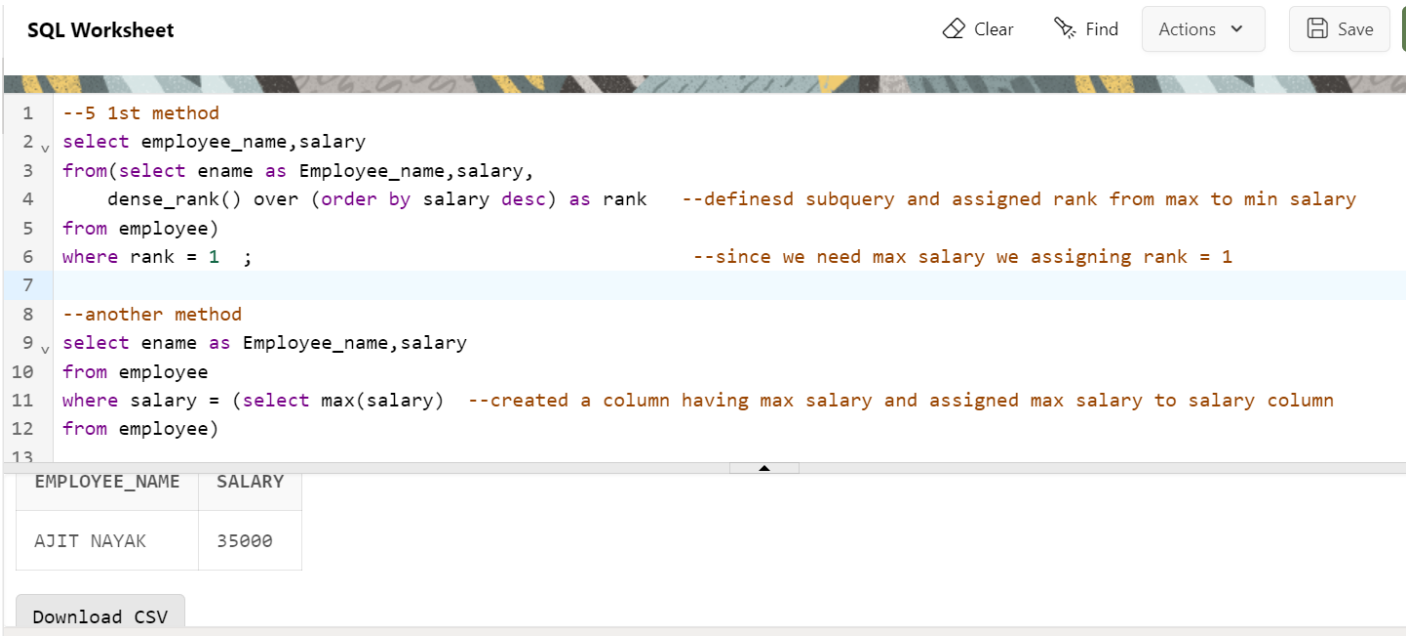
EMPLOYEE_NAME	ADDRESS	ESRNO
MEENAKSHI	73 BRIKLY	334548
DEBASMITA	1 QUEENS LAND	295485

E) Display the employee who is paid most in the company.

```
--5 1st method
select employee_name,salary
from(select ename as Employee_name,salary,
   dense_rank() over (order by salary desc) as rank   --definesd subquery and assigned rank from max to min salary
from employee)
where rank = 1  ;                          --since we need max salary we assigning rank = 1

--another method
select ename as Employee_name,salary
from employee
where salary = (select max(salary)  --created a column having max salary and assigned max salary to salary column
from employee)
```

Insert Image –



Note : *I have solved this question by using 2 methods*

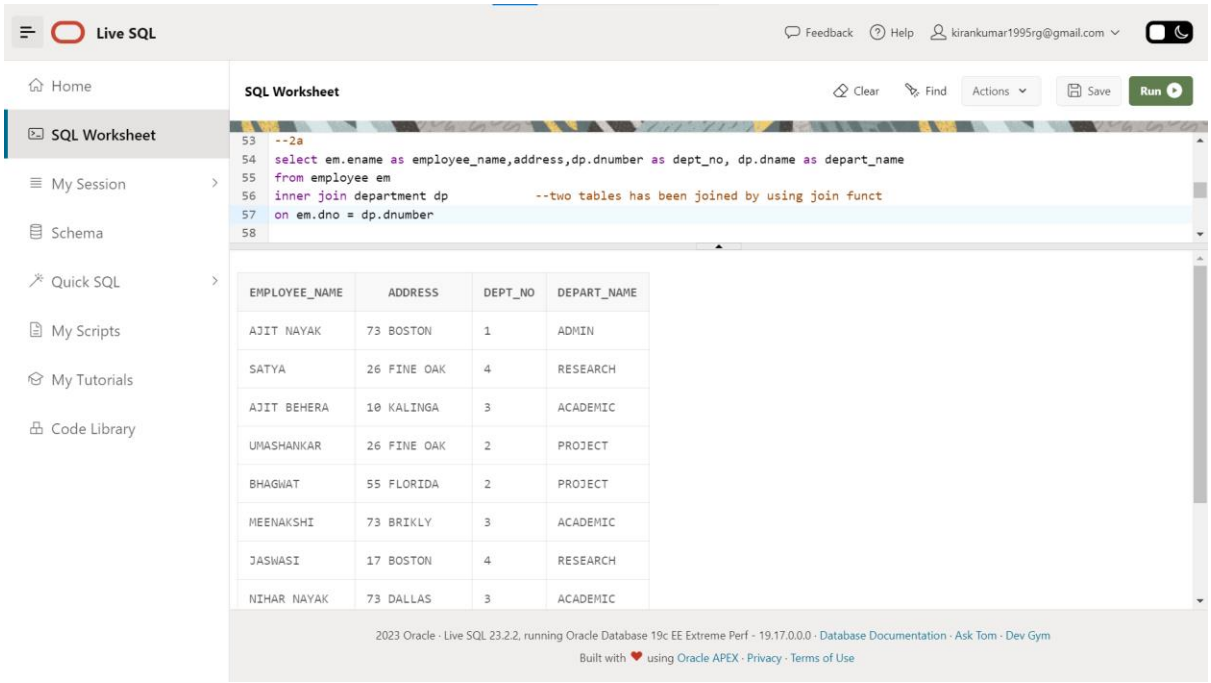
1) *Using window function and subquery*
2) *Using subquery and filtering*

Major Question 2

A) Display employee name, address, department no and department name.

```
select em.ename as employee_name,address,dp.dnumber as dept_no, dp.dname as depart_name
from employee em
inner join department dp                --two tables has been joined by using join funct
on em.dno = dp.dnumber
```

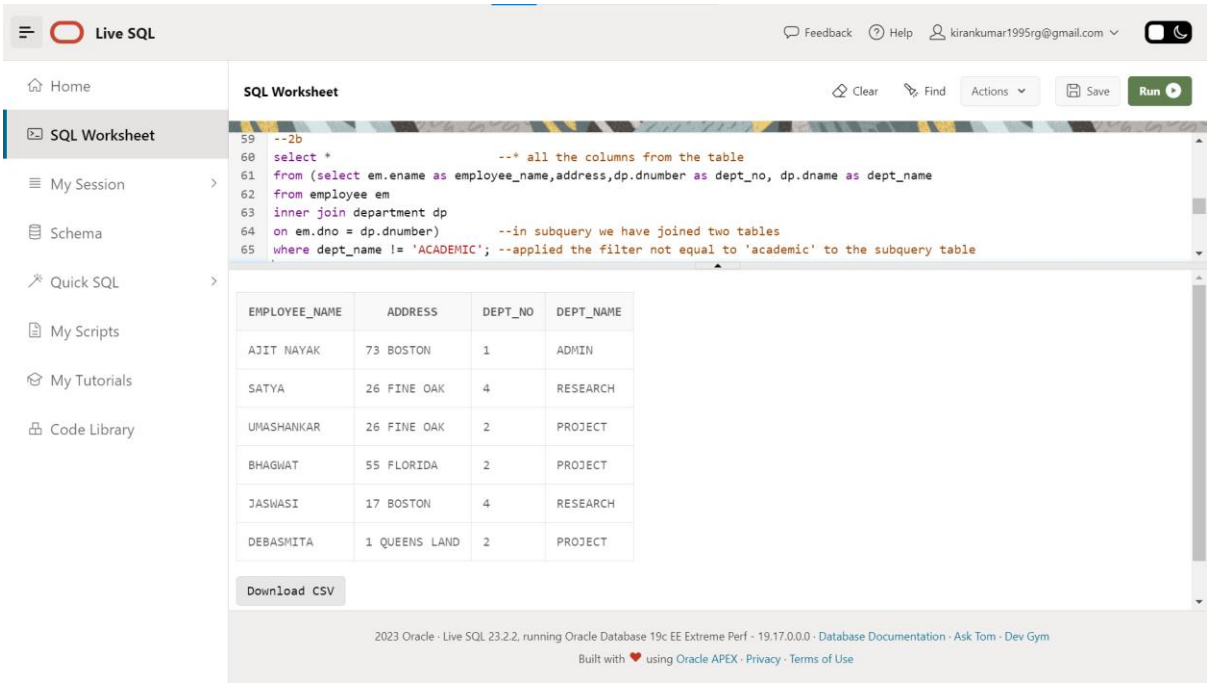
Insert Image –



B) Display all the employees who are *not in* ACADEMIC department

```
select *                                --* all the columns from the table
from (select em.ename as employee_name,address,dp.dnumber as dept_no, dp.dname as dept_name
from employee em
inner join department dp
on em.dno = dp.dnumber)                 --in subquery we have joined two tables
where dept_name != 'ACADEMIC';          --applied the filter not equal to 'academic' to the subquery table
```

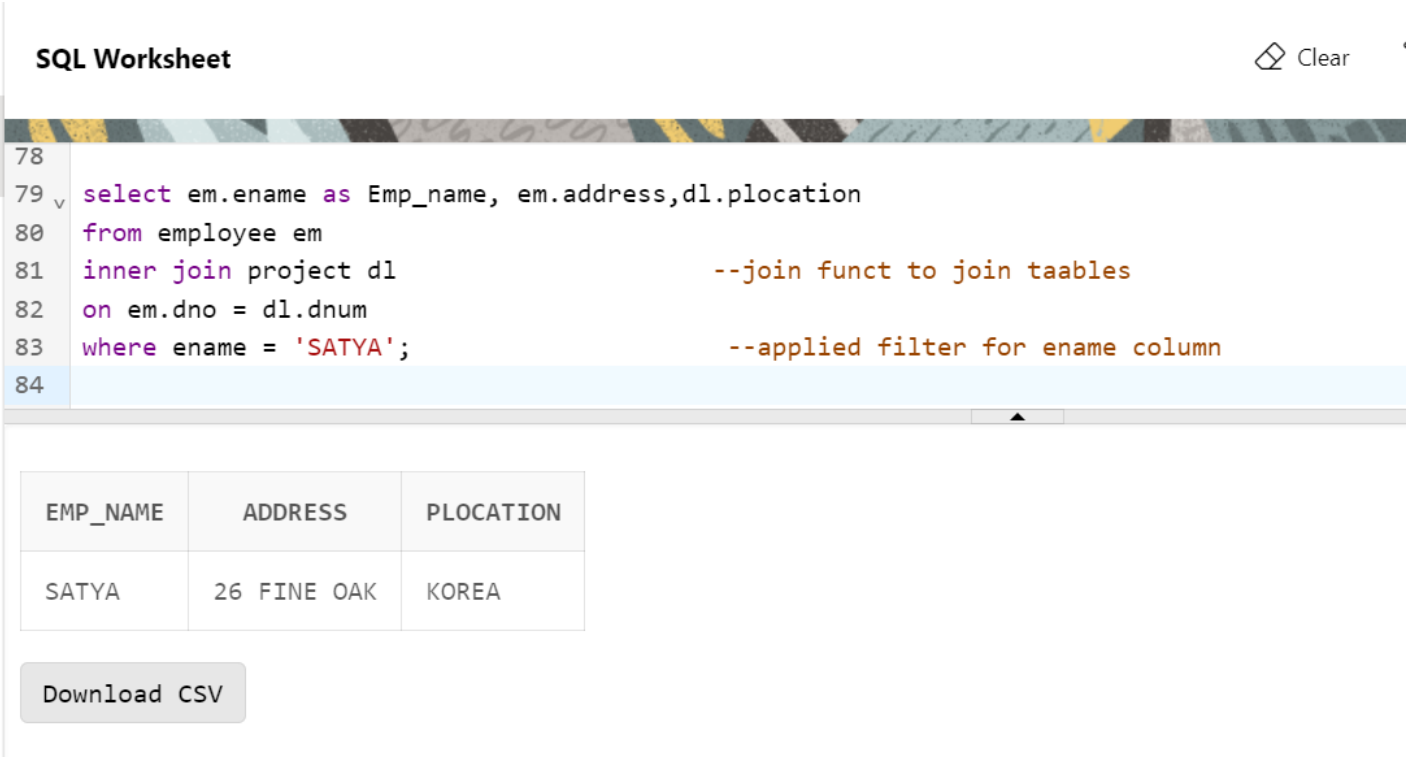
Insert Image –



C) Display SATYAS' project location.

```
select em.ename as Emp_name, em.address,dl.plocation
from employee em
inner join project dl                    --join funct to join taables
on em.dno = dl.dnum
where ename = 'SATYA';                   --applied filter for ename column
```

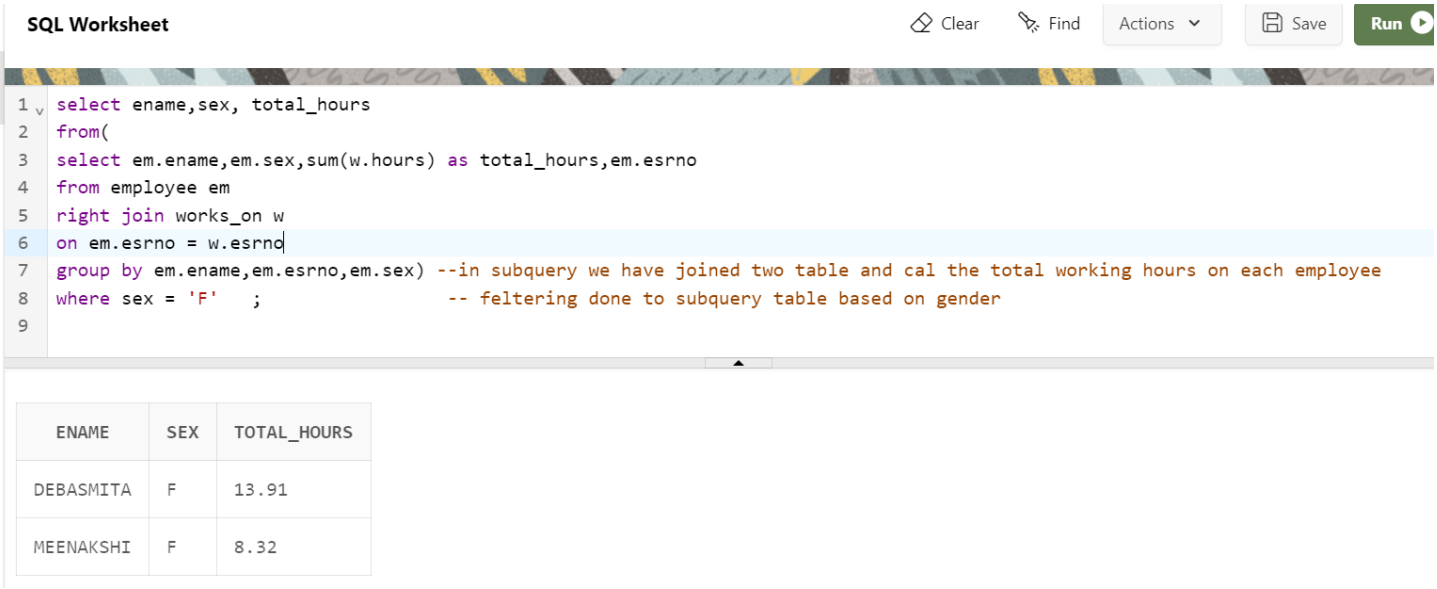
Insert Image -



D) Find the total working hours of *each* female employee.

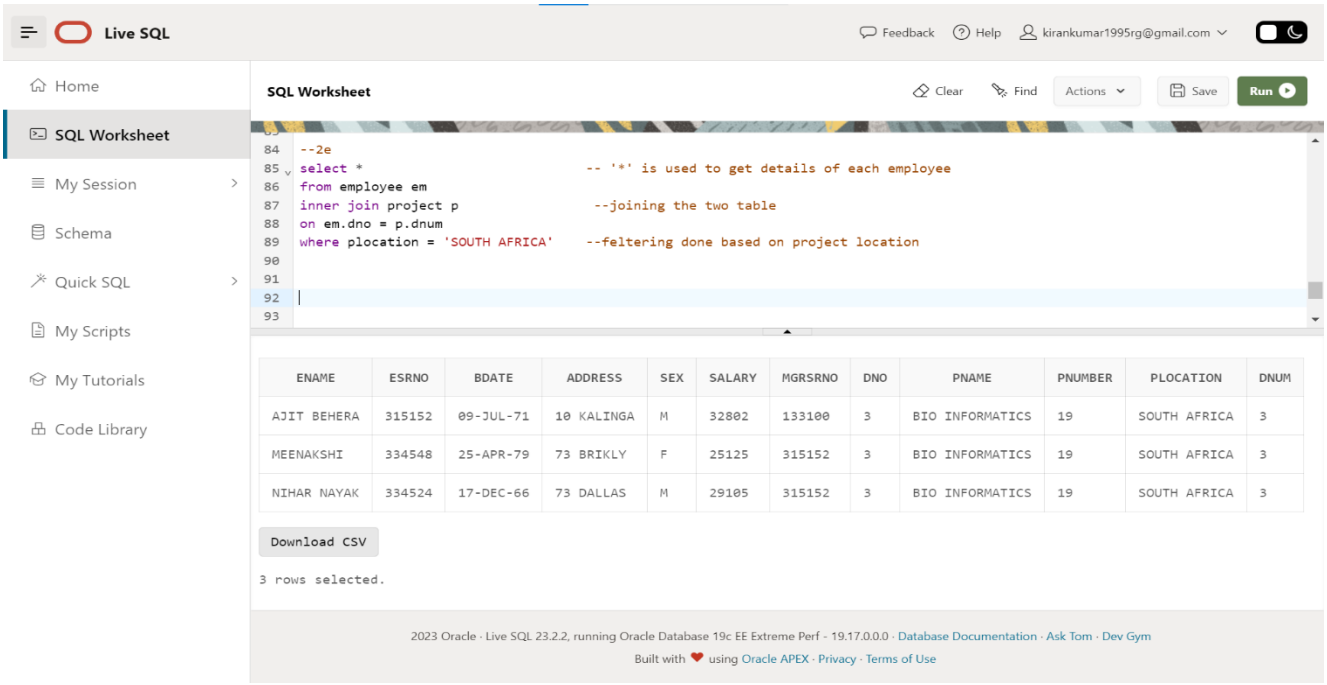
```
select ename,sex, total_hours
from(
select em.ename,em.sex,sum(w.hours) as total_hours,em.esrno
from employee em
right join works_on w
on em.esrno = w.esrno
group by em.ename,em.esrno,em.sex) --in subquery we have joined two table and cal the total working hours on each employee
where sex = 'F'   ;              -- feltering done to subquery table based on gender
```

Insert Image -



ENAME	SEX	TOTAL_HOURS
DEBASMITA	F	13.91
MEENAKSHI	F	8.32

E) Display the details of the people whose projects are located at SOUTH AFRICA.

```
select *                        -- '*' is used to get details of each employee
from employee em
inner join project p            --joining the two table
on em.dno = p.dnum
where plocation = 'SOUTH AFRICA'    --feltering done based on project location
```

Insert Image –