

#why do we need window functions?

#get me total salary that a company xyz pays?

```
select sum(salary) from employees; #691400.00
```

#get me total salary that a company xyz pays at every dept level?

```
select department_id,sum(salary) as dept_wise_salary from employees
group by department_id; #90 --> 58000.00 100 --> 51600.00
```

#show me total salary across every employees?

```
select * from employees;
```

```
select *, sum(salary) from employees;
```

```
select *, (select sum(salary) from employees) as total_sal
from employees;
```

#window functions

```
select * ,
sum(salary) over() as total_sal
from employees;
```

#get me total salary that a company xyz pays at every dept level?

```
select department_id,sum(salary) as dept_wise_salary from employees
group by department_id; #12 records
```

#get me total salary that a company xyz pays at every dept level displayed
#at every row?

```
select
    employee_id,
    salary,
    department_id,
    sum(salary)over() as tot_salary,
    sum(salary)over(partition by department_id) as dept_wise_salary
from employees;
```

get me avg dept_wise_salary across every row sorted by first name

```
select * from employees
where department_id = 90;
```

```
select
    employee_id,
    first_name,
    salary,
    department_id,
    ROUND(avg(salary) OVER(partition by department_id
```

```
        order by first_name ),2) as avg_salary
from employees;
```

```
###row number
```

```
select
    employee_id,
    first_name,
    salary,
    department_id,
    row_number() OVER() as rw_num
from employees;
```

```
# get me 13th highest salary from employees
```

```
select * from
(
select
    employee_id,first_name,salary,department_id,
    row_number() over(order by salary desc) as rw_numbr,
    rank() over(order by salary desc) as rnk,
    dense_rank() over(order by salary desc) as dense_rnk
from employees
)t
where t. dense_rnk = 13;
```

```
select
    employee_id,first_name,last_name,salary,department_id,hire_date,
    sum(salary) over(order by hire_date desc) as sal
from employees
where department_id = 90;
```

```
###DCS
```

```
select * from
(
select
    employee_id,
    salary,
    department_id,
    sum(salary)over(partition by department_id) as tot_salary,
    avg(salary)over(partition by department_id) as dept_wise_salary
from employees
)t where salary > t.dept_wise_salary;
```

```
#offset demo
```

```
select * from employees
offset 12 limit 1;
```