

# AGGREGATE FUNCTIONS

## 1.AVG

select AVG(salary) from employees;

**OUTPUT:**

	AVG(salary)
▶	8060.000000

## 2.COUNT

select department\_id,COUNT(\*) from employees GROUP BY department\_id;

**OUTPUT:**

	department_id	COUNT(*)
▶	1	1
	2	2
	3	6
	4	1
	5	7
	6	5
	7	1
	8	6
	9	3
	10	6
	11	2

## 3.MAX

select employee\_id,first\_name,last\_name,salary from employees where salary = (select MAX(salary) from employees);

**OUTPUT:**

	employee_id	first_name	last_name	salary
	100	Steven	King	24000.00

## 4.MIN

```
select employee_id,first_name,last_name,salary from employees
where salary = (select MIN(salary) from employees);
```

### OUTPUT:

	employee_id	first_name	last_name	salary
▶	119	Karen	Colmenares	2500.00

## 5.SUM

```
select SUM(salary) from employees where department_id = 5;
```

### OUTPUT:

```
SUM(salary)
41200
```

## GROUP BY

```
select department_id,COUNT(employee_id) headcount from employees
GROUP BY department_id;
```

### OUTPUT:

	department_id	headcount
▶	1	1
	2	2
	3	6
	4	1
	5	7
	6	5
	7	1
	8	6
	9	3
	10	6
	11	2

SUM(salary)

## HAVING CLAUSE

```
select manager_id,first_name,last_name,COUNT(employee_id)
direct_reports from employees where manager_id IS NOT NULL
GROUP BY manager_id;
```

### OUTPUT:

	manager_id	first_name	last_name	direct_reports
►	100	Neena	Kochhar	10
	101	Nancy	Greenberg	5
	102	Alexander	Hunold	1
	103	Bruce	Ernst	4
	108	Daniel	Faviet	5
	114	Alexander	Khoo	5
	120	Irene	Mikkilineni	1
	123	Sarah	Bell	2
	149	Jonathon	Taylor	4
	201	Pat	Fay	1
	205	William	Gietz	1

## ORDER BY

```
select employee_id,first_name,last_name,hire_date,salary from
employees ORDER BY salary desc;
```

### OUTPUT:

	employee_id	first_name	last_name	hire_date	salary
	100	Steven	King	1987-06-17	24000.00
	101	Neena	Kochhar	1989-09-21	17000.00
	102	Lex	De Haan	1993-01-13	17000.00
	145	John	Russell	1996-10-01	14000.00
	146	Karen	Partners	1997-01-05	13500.00
	201	Michael	Hartstein	1996-02-17	13000.00
	108	Nancy	Greenberg	1994-08-17	12000.00