# GROUP &FUNCTIONS

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SQL> create table employee(eid number(10),ename varchar(10),esalary number(5),dno number(3));

Table created.

SQL> insert into employee values(101,'Valan',7000,10);

1 row created.

SQL> insert into employee values(102,'Raj',3000,10);

1 row created.

SQL> insert into employee values(103,'Kumar',4000,20);

1 row created.

SQL> insert into employee values(104,'Vijay',5000,20);

1 row created.

SQL> insert into employee values(105,'Ajay',6000,30);

1 row created.

SQL> insert into employee values(106,'',3000,30);

1 row created.

SQL> commit;

Commit complete.

SQL> select \* from employee;

EID ENAME ESALARY DNO

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101 Valan 7000 10

102 Raj 3000 10

103 Kumar 4000 20

104 Vijay 5000 20

105 Ajay 6000 30

106 3000 30

6 rows selected.

SQL> select dno,count(%) from employee group by dno;

select dno,count(%) from employee group by dno

\*

ERROR at line 1:

ORA-00911: invalid character

SQL> select dno,count(\*) from employee group by dno;

DNO COUNT(\*)

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30 2

20 2

10 2

SQL> select dno,count(\*) sum(esalary),avg(esalary),min(esalary),max(esalary) from employee group by dno;

select dno,count(\*) sum(esalary),avg(esalary),min(esalary),max(esalary) from employee group by dno

\*

ERROR at line 1:

ORA-00923: FROM keyword not found where expected

SQL> select dno,count(\*) ,sum(esalary),avg(esalary),min(esalary),max(esalary) from employee group by dno;

DNO COUNT(\*) SUM(ESALARY) AVG(ESALARY) MIN(ESALARY) MAX(ESALARY)

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30 2 9000 4500 3000 6000

20 2 9000 4500 4000 5000

10 2 10000 5000 3000 7000

SQL> select dno,count(\*) ,sum(esalary),avg(esalary),min(esalary),max(esalary) from employee group by dno order by dno;

DNO COUNT(\*) SUM(ESALARY) AVG(ESALARY) MIN(ESALARY) MAX(ESALARY)

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10 2 10000 5000 3000 7000

20 2 9000 4500 4000 5000

30 2 9000 4500 3000 6000

SQL> select dno,count(\*) ,sum(esalary),avg(esalary),min(esalary),max(esalary) from employee group by having avg(esalary)<5000 dno order by dno;

select dno,count(\*) ,sum(esalary),avg(esalary),min(esalary),max(esalary) from employee group by having avg(esalary)<5000 dno order by dno

\*

ERROR at line 1:

ORA-00936: missing expression

SQL> select dno,count(\*) ,sum(esalary),avg(esalary),min(esalary),max(esalary) from employee group by dno having avg(esalary)<5000 dno order by dno;

select dno,count(\*) ,sum(esalary),avg(esalary),min(esalary),max(esalary) from employee group by dno having avg(esalary)<5000 dno order by dno

\*

ERROR at line 1:

ORA-00933: SQL command not properly ended

SQL> select dno,count(\*) ,sum(esalary),avg(esalary),min(esalary),max(esalary) from employee group by dno having avg(esalary)<5000 order by dno;

DNO COUNT(\*) SUM(ESALARY) AVG(ESALARY) MIN(ESALARY) MAX(ESALARY)

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20 2 9000 4500 4000 5000

30 2 9000 4500 3000 6000

SQL> select dno,count(\*) ,sum(esalary),avg(esalary),min(esalary),max(esalary) from employee group by dno having min(esalary)>5000 order by dno;

no rows selected

SQL> select dno,count(\*) ,sum(esalary),avg(esalary),min(esalary),max(esalary) from employee group by dno having min(esalary)>3000 order by dno;

DNO COUNT(\*) SUM(ESALARY) AVG(ESALARY) MIN(ESALARY) MAX(ESALARY)

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20 2 9000 4500 4000 5000

SQL> create table student(reg\_no number(5) primary key,stud\_name varchar2(20) not null,stud\_email varchar2(20) unique,stud\_age number(3) check(stud\_age>0),stud\_location varchar2(20) default 'Erode');

Table created.

SQL> insert into student values(1234,'Fathima','fathima@gmail.com',20,'karur');

1 row created.

SQL> insert into student values(123456,'','fathimfkgjgrrera@gmail.com',2000,'');

insert into student values(123456,'','fathimfkgjgrrera@gmail.com',2000,'')

\*

ERROR at line 1:

ORA-01438: value larger than specified precision allowed for this column

SQL> insert into student values(12346,'','fathimfkgjgrrera@gmail.com',2000,'');

insert into student values(12346,'','fathimfkgjgrrera@gmail.com',2000,'')

\*

ERROR at line 1:

ORA-01400: cannot insert NULL into ("SYSTEM"."STUDENT"."STUD\_NAME")

SQL> insert into student values(12346,'dfgfg','fathimfkgjgrrera@gmail.com',2000,'');

insert into student values(12346,'dfgfg','fathimfkgjgrrera@gmail.com',2000,'')

\*

ERROR at line 1:

ORA-12899: value too large for column "SYSTEM"."STUDENT"."STUD\_EMAIL" (actual:

26, maximum: 20)

SQL> insert into student values(12346,'dfgfg','fathi@gmail.com',2000,'');

insert into student values(12346,'dfgfg','fathi@gmail.com',2000,'')

\*

ERROR at line 1:

ORA-01438: value larger than specified precision allowed for this column

SQL> insert into student values(12346,'dfgfg','fathi@gmail.com',200,'');

1 row created.

SQL> commit;

Commit complete.

SQL> select \* from student;

REG\_NO STUD\_NAME STUD\_EMAIL STUD\_AGE

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STUD\_LOCATION

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1234 Fathima fathima@gmail.com 20

karur

12346 dfgfg fathi@gmail.com 200

SQL> insert into student values(12346,'dfgfg','fathi@gmail.com',2000,);

insert into student values(12346,'dfgfg','fathi@gmail.com',2000,)

\*

ERROR at line 1:

ORA-00936: missing expression

SQL> insert into student values(12346,'dfgfg','fathi@gmail.com',2000, );

insert into student values(12346,'dfgfg','fathi@gmail.com',2000, )

\*

ERROR at line 1:

ORA-00936: missing expression

SQL> insert into student values(12346,'dfgfg','fathi@gmail.com',2000,' ' );

insert into student values(12346,'dfgfg','fathi@gmail.com',2000,' ' )

\*

ERROR at line 1:

ORA-01438: value larger than specified precision allowed for this column

SQL> insert into student values(12346,'dfgfg','fathi@gmail.com',200, );

insert into student values(12346,'dfgfg','fathi@gmail.com',200, )

\*

ERROR at line 1:

ORA-00936: missing expression

SQL> insert into student values(12346,'dfgfg','fathi@gmail.com',200,'' );

insert into student values(12346,'dfgfg','fathi@gmail.com',200,'' )

\*

ERROR at line 1:

ORA-00001: unique constraint (SYSTEM.SYS\_C007000) violated

SQL> insert into student values(12346,'dfgfg','fathi@gmail.com',200);

insert into student values(12346,'dfgfg','fathi@gmail.com',200)

\*

ERROR at line 1:

ORA-00947: not enough values

SQL> insert into student values(12346,'dfgfg','fathi@gmail.com',200,);

insert into student values(12346,'dfgfg','fathi@gmail.com',200,)

\*

ERROR at line 1:

ORA-00936: missing expression

SQL> insert into student values(12346,'dfgfg','fathi@gmail.com',200, );

insert into student values(12346,'dfgfg','fathi@gmail.com',200, )

\*

ERROR at line 1:

ORA-00936: missing expression

SQL> commit;

Commit complete.

SQL> select \* from student;

REG\_NO STUD\_NAME STUD\_EMAIL STUD\_AGE

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STUD\_LOCATION

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1234 Fathima fathima@gmail.com 20

karur

12346 dfgfg fathi@gmail.com 200

SQL>