**MySQL practice 01/08/25**

mysql> use university;

Database changed

mysql> create table classroom (building varchar(15), room\_number varchar(7), capacity numeric(4,0), primary key (building, room\_number));

Query OK, 0 rows affected (0.06 sec)

mysql> desc classroom;

+-------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------------+--------------+------+-----+---------+-------+

| building | varchar(15) | NO | PRI | NULL | |

| room\_number | varchar(7) | NO | PRI | NULL | |

| capacity | decimal(4,0) | YES | | NULL | |

+-------------+--------------+------+-----+---------+-------+

3 rows in set (0.04 sec)

mysql> insert into classroom values (('packard','101',500), ('painter','514',10), ('taylor','3128',70), ('watson','120',50));

ERROR 1136 (21S01): Column count doesn't match value count at row 1

mysql> insert into classroom values (('packard','101',(500,0)), ('painter','514',(10,0)), ('taylor','3128',(70,0)), ('watson','120',(50,0)));

ERROR 1136 (21S01): Column count doesn't match value count at row 1

mysql> alter table classroom modify building varchar(50);

Query OK, 0 rows affected (0.02 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> insert into classroom values (('packard','101',(500,0)), ('painter','514',(10,0)), ('taylor','3128',(70,0)), ('watson','120',(50,0)));

ERROR 1136 (21S01): Column count doesn't match value count at row 1

mysql> insert into classroom(building, room\_number, capacity) values (('packard','101',(500,0)), ('painter','514',(10,0)), ('taylor','3128',(70,0)), ('watson','120',(50,0)));

ERROR 1136 (21S01): Column count doesn't match value count at row 1

mysql> select \* from classroom;

Empty set (0.00 sec)

mysql> insert into classroom(building, room\_number, capacity) values ('packard','101',(500,0)), ('painter','514',(10,0)), ('taylor','3128',(70,0)), ('watson','120',(50,0));

ERROR 1241 (21000): Operand should contain 1 column(s)

mysql> show databases;

+--------------------+

| Database |

+--------------------+

| company |

| companyy |

| employee |

| information\_schema |

| mysql |

| performance\_schema |

| sakila |

| sys |

| university |

| world |

+--------------------+

10 rows in set (0.01 sec)

mysql> use employee;

Database changed

mysql> show tables;

Empty set (0.01 sec)

mysql> use university;

Database changed

mysql> desc classroom;

+-------------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------------+--------------+------+-----+---------+-------+

| building | varchar(50) | NO | PRI | NULL | |

| room\_number | varchar(7) | NO | PRI | NULL | |

| capacity | decimal(4,0) | YES | | NULL | |

+-------------+--------------+------+-----+---------+-------+

3 rows in set (0.00 sec)

mysql> insert into classroom (building, room\_number, capacity) values ('packard','101',500),('painter','514',10), ('taylor','3128', 70), ('watson', '120', 50), ('watson', '100', 30);

Query OK, 5 rows affected (0.03 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> select \* from classroom;

+----------+-------------+----------+

| building | room\_number | capacity |

+----------+-------------+----------+

| packard | 101 | 500 |

| painter | 514 | 10 |

| taylor | 3128 | 70 |

| watson | 100 | 30 |

| watson | 120 | 50 |

+----------+-------------+----------+

5 rows in set (0.00 sec)

mysql> select building from classroom where room\_number<3000;

+----------+

| building |

+----------+

| packard |

| painter |

| watson |

| watson |

+----------+

4 rows in set (0.03 sec)

mysql> select building from classroom where room\_number>3000;

+----------+

| building |

+----------+

| taylor |

+----------+

1 row in set (0.00 sec)

mysql> select room\_number from classroom where building like '%watson%';

+-------------+

| room\_number |

+-------------+

| 100 |

| 120 |

+-------------+

2 rows in set (0.00 sec)

mysql> select room\_number from classroom where building like '%wat';

Empty set (0.00 sec)

mysql> select room\_number from classroom where length(building)=6;

+-------------+

| room\_number |

+-------------+

| 3128 |

| 100 |

| 120 |

+-------------+

3 rows in set (0.00 sec)

mysql> select building from classroom where capacity>100 order by building asc;

+----------+

| building |

+----------+

| packard |

+----------+

1 row in set (0.00 sec)

mysql> select building from classroom where capacity<100 order by building desc;

+----------+

| building |

+----------+

| watson |

| watson |

| taylor |

| painter |

+----------+

4 rows in set (0.00 sec)

mysql> select distinct building from classroom;

+----------+

| building |

+----------+

| packard |

| painter |

| taylor |

| watson |

+----------+

4 rows in set (0.00 sec)

mysql> select building from classroom where capacity between 10 and 70;

+----------+

| building |

+----------+

| painter |

| taylor |

| watson |

| watson |

+----------+

4 rows in set (0.00 sec)

mysql> select building from classroom where building like'%p%';

+----------+

| building |

+----------+

| packard |

| painter |

+----------+

2 rows in set (0.00 sec)

mysql> create table department (dept\_name varchar(20), building varchar(15), budget numeric(12,2) check(budget>0), primary key(dept\_name));

Query OK, 0 rows affected (0.07 sec)

mysql> desc department;

+-----------+---------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-----------+---------------+------+-----+---------+-------+

| dept\_name | varchar(20) | NO | PRI | NULL | |

| building | varchar(15) | YES | | NULL | |

| budget | decimal(12,2) | YES | | NULL | |

+-----------+---------------+------+-----+---------+-------+

3 rows in set (0.00 sec)

mysql> insert into department(dept\_name, building, budget) values ('biology','watson',90000), ('Comp.Sci.','taylor',100000), ('Elec. Eng','taylor',85000), ('finamnce','painter',120000), ('History','painter',50000), ('Music','packard',80000),('physics','watson',70000);

Query OK, 7 rows affected (0.01 sec)

Records: 7 Duplicates: 0 Warnings: 0

mysql> select \* from department;

+-----------+----------+-----------+

| dept\_name | building | budget |

+-----------+----------+-----------+

| biology | watson | 90000.00 |

| Comp.Sci. | taylor | 100000.00 |

| Elec. Eng | taylor | 85000.00 |

| finamnce | painter | 120000.00 |

| History | painter | 50000.00 |

| Music | packard | 80000.00 |

| physics | watson | 70000.00 |

+-----------+----------+-----------+

7 rows in set (0.00 sec)

mysql> select \* from department where building in dept\_name;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'dept\_name' at line 1

mysql> select count(\*) from department where building ='painter';

+----------+

| count(\*) |

+----------+

| 2 |

+----------+

1 row in set (0.00 sec)

mysql> select sum(dept\_name) as total dept\_names from department;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'dept\_names from department' at line 1

mysql> select sum(dept\_name) as total\_dept\_name from department;

+-----------------+

| total\_dept\_name |

+-----------------+

| 0 |

+-----------------+

1 row in set, 7 warnings (0.01 sec)

mysql> select avg(building) as average\_building from department;

+------------------+

| average\_building |

+------------------+

| 0 |

+------------------+

1 row in set, 7 warnings (0.02 sec)

mysql> select count(\*) from department where building ='painter' group by budget>50000;

+----------+

| count(\*) |

+----------+

| 1 |

| 1 |

+----------+

2 rows in set (0.04 sec)

mysql> select name, dept\_name,building from department where classromm.building=department.building;

ERROR 1054 (42S22): Unknown column 'name' in 'field list'

mysql> select dept\_name,building from department where classromm.building=department.building;

ERROR 1054 (42S22): Unknown column 'classromm.building' in 'where clause'

mysql> select dept\_name,building from department where classroom.building=department.building;

ERROR 1054 (42S22): Unknown column 'classroom.building' in 'where clause'

mysql>