

## #DAY-3

### RDBMS&QUERIES

```
mysql> create table dept(dept_id int primary key,dept_name varchar(30) NOT NULL);
```

Query OK, 0 rows affected (0.09 sec)

```
mysql> desc dept;
```

Field	Type	Null	Key	Default	Extra
dept_id	int	NO	PRI	NULL	
dept_name	varchar(30)	NO		NULL	

2 rows in set (0.01 sec)

```
mysql> create table year(std_id int primary key,year varchar(30) NOT NULL);
```

Query OK, 0 rows affected (0.06 sec)

```
mysql> desc year;
```

Field	Type	Null	Key	Default	Extra
-------	------	------	-----	---------	-------

std_id	int	NO	PRI	NULL		
--------	-----	----	-----	------	--	--

year	varchar(30)	NO		NULL		
------	-------------	----	--	------	--	--

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

2 rows in set (0.00 sec)

```
mysql> create table student(std_id int primary key,sname varchar(30),year
varchar(30) NOT NULL,dept_id int, FOREIGN KEY(dept_id) references
dept(dept_id));
```

Query OK, 0 rows affected (0.11 sec)

```
mysql> desc student;
```

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

Field	Type	Null	Key	Default	Extra	
-------	------	------	-----	---------	-------	--

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

std_id	int	NO	PRI	NULL		
--------	-----	----	-----	------	--	--

sname	varchar(30)	YES		NULL		
-------	-------------	-----	--	------	--	--

year	varchar(30)	NO		NULL		
------	-------------	----	--	------	--	--

dept_id	int	YES	MUL	NULL		
---------	-----	-----	-----	------	--	--

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

4 rows in set (0.00 sec)

```
mysql> insert into dept values(1,'ME');
```

```
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into dept values(2,'CSE');
```

```
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into dept values(3,'ME');
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into dept values(4,'ECE');
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into dept values(5,'EEE');
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from dept;
```

```
+-----+-----+
```

```
| dept_id | dept_name |
```

```
+-----+-----+
```

```
|    1 | ME      |
```

```
|    2 | CSE     |
```

```
|    3 | ME      |
```

```
|    4 | ECE     |
```

```
|    5 | EEE     |
```

```
+-----+-----+
```

```
5 rows in set (0.00 sec)
```

```
mysql> insert into year values(1,1);
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into year values(2,2);
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into year values(3,3);
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into year values(4,4);
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from year;
```

```
+-----+-----+
```

```
| std_id | year |
```

```
+-----+-----+
```

```
| 1 | 1 |
```

```
| 2 | 2 |
```

```
| 3 | 3 |
```

```
| 4 | 4 |
```

```
+-----+-----+
```

```
4 rows in set (0.00 sec)
```

```
mysql> insert into student values(1,"abc",1,1);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> insert into student values(2,"adcs",1,1);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> insert into student values(3,"xyz",1,1);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> insert into student values(4,"abc",1,2);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> insert into student values(5,"abcd",1,2);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> insert into student values(6,"xyz",2,2);
```

Query OK, 1 row affected (0.02 sec)

```
mysql> insert into student values(7,"xyz",3,2);
```

Query OK, 1 row affected (0.01 sec)

```
mysql> select * from student;
```

```
+-----+-----+-----+-----+
```

```
| std_id | sname | year | dept_id |
```

```
+-----+-----+-----+-----+
```

```
| 1 | abc | 1 | 1 |
```

```
| 2 | adcs | 1 | 1 |
```

```
| 3 | xyz | 1 | 1 |
```

```
| 4 | abc | 1 | 2 |
```

	5		abcd		1		2	
--	---	--	------	--	---	--	---	--

	6		xyz		2		2	
--	---	--	-----	--	---	--	---	--

	7		xyz		3		2	
--	---	--	-----	--	---	--	---	--

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

7 rows in set (0.00 sec)

## QUERIES:

```
mysql> select * from student where dept_id=(select dept_id from dept where dept_name='CSE');
```

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

	std_id		sname		year		dept_id	
--	--------	--	-------	--	------	--	---------	--

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

	4		abc		1		2	
--	---	--	-----	--	---	--	---	--

	5		abcd		1		2	
--	---	--	------	--	---	--	---	--

	6		xyz		2		2	
--	---	--	-----	--	---	--	---	--

	7		xyz		3		2	
--	---	--	-----	--	---	--	---	--

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

4 rows in set (0.00 sec)

```
mysql> select distinct d.dept_name from student s join dept d on s.dept_id=d.dept_id;
```

+-----+

	dept_name	
--	-----------	--

```
+-----+
```

```
| ME      |
```

```
| CSE     |
```

```
+-----+
```

2 rows in set (0.00 sec)

```
mysql> select s.sname,d.dept_name from student s join dept d on  
s.dept_id=d.dept_id order by d.dept_name,s.sname;
```

```
+-----+-----+
```

```
| sname | dept_name |
```

```
+-----+-----+
```

```
| abc   | CSE      |
```

```
| abcd  | CSE      |
```

```
| xyz   | CSE      |
```

```
| xyz   | CSE      |
```

```
| abc   | ME        |
```

```
| adcs  | ME        |
```

```
| xyz   | ME        |
```

```
+-----+-----+
```

7 rows in set (0.00 sec)

```
mysql> quit
```

Bye