LAB REPORT # 04

DEPARTMENT OF SOFTWARE ENGINEERING

Submitted To   MAM ASMA ZAHRA

Submitted By   ILYAS AHMED

ROLL#SP21033

SECTION#A

ID: NUML-S21-21490

Subject: DATABASE MANAGEMENT SYSTEM

DATED: 04-10-2022

Using Single-Row Character Functions to Customize Output

- **To describe various types of functions available in SQL**
- **To use character, number, and date functions in SELECT statements**

- # QUERY TO CREATE A TABLE

use ilyas_lab_04;

create table employe_Detail(

  employ_id int primary key auto_increment,

  firstName varchar(45) not null,

  lastName varchar(45) not null,

  salary int,

  job_id varchar(45) not null

);

insert into employe_Detail(firstName,lastName,salary,job_id)

values

('arham','khan',40000,'mag-4'),

('Ilyas','Ahmad',35000,'mag-5'),

('Nouman','shafique',50000,'IT-2'),

('Abdullah','kamal',35000,'Uclerk-45'),

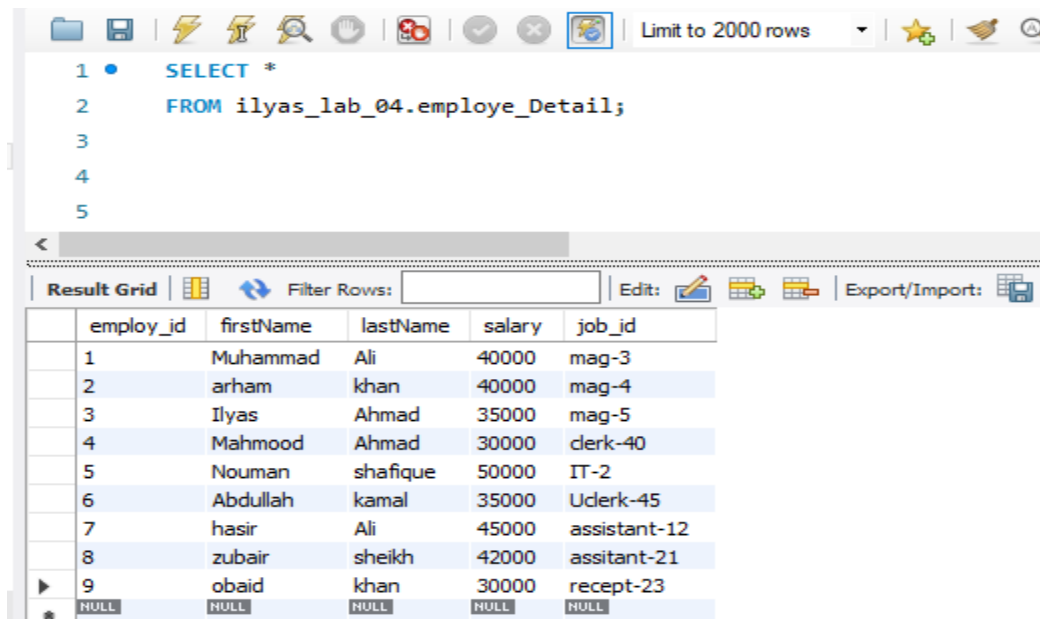('hasir','Ali',45000,'assistant-12'),

('zubair','sheikh',42000,'assitant-21'),

('obaid','khan',30000,'recept-23'),

('asad','ejaz',32000,'clerk-23');

SELECT *
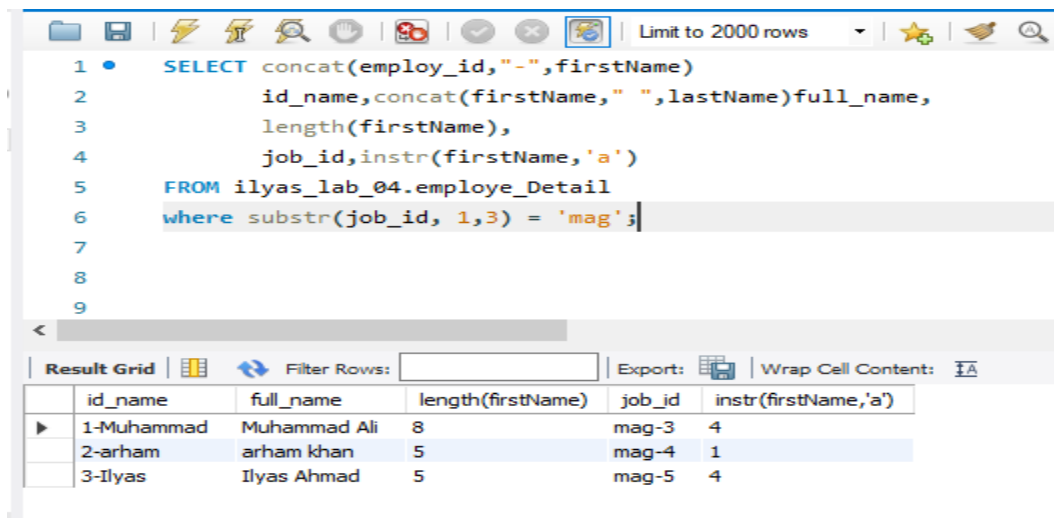
FROM ilyas_lab_04.employe_Detail;

- **VIEW OF TABLE**

- **Character manipulation function**
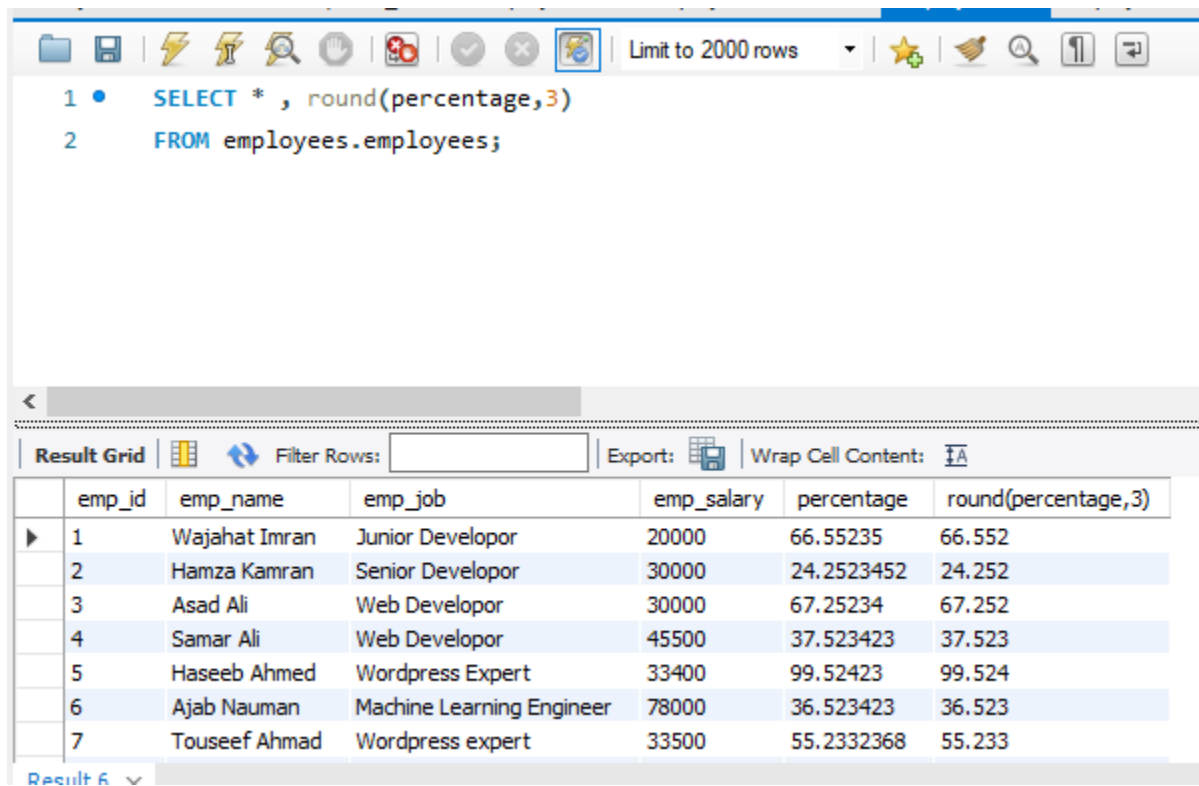


```
1 ● SELECT concat(employ_id,"-",firstName)
2         id_name,concat(firstName," ",lastName)full_name,
3         length(firstName),
4         job_id,instr(firstName,'a')
5   FROM ilyas_lab_04.employe_Detail
6   where substr(job_id, 1,3) = 'mag';
7
8
9
```

id_name	full_name	length(firstName)	job_id	instr(firstName,'a')
1-Muhammad	Muhammad Ali	8	mag-3	4
2-arham	arham khan	5	mag-4	1
3-Ilyas	Ilyas Ahmad	5	mag-5	4

- **Round function**


```
1 ● SELECT * , round(percentage,3)
2   FROM employees.employees;
```

emp_id	emp_name	emp_job	emp_salary	percentage	round(percentage,3)
1	Wajahat Imran	Junior Developor	20000	66.55235	66.552
2	Hamza Kamran	Senior Developor	30000	24.2523452	24.252
3	Asad Ali	Web Developor	30000	67.25234	67.252
4	Samar Ali	Web Developor	45500	37.523423	37.523
5	Haseeb Ahmed	Wordpress Expert	33400	99.52423	99.524
6	Ajab Nauman	Machine Learning Engineer	78000	36.523423	36.523
7	Touseef Ahmad	Wordpress expert	33500	55.2332368	55.233

Result 6 ⌄

- **Truncate function**

```
1  •   SELECT * , truncate(percentage,2)
2      FROM employees.employees;
```

emp_id	emp_name	emp_job	emp_salary	percentage	truncate(percentage,2)
1	Wajahat Imran	Junior Developor	20000	66.55235	66.55
2	Hamza Kamran	Senior Developor	30000	24.2523452	24.25
3	Asad Ali	Web Developor	30000	67.25234	67.25
4	Samar Ali	Web Developor	45500	37.523423	37.52
5	Haseeb Ahmed	Wordpress Expert	33400	99.52423	99.52
6	Ajab Nauman	Machine Learning Engineer	78000	36.523423	36.52
7	Touseef Ahmad	Wordpress expert	33500	55.2332368	55.23

Result 7 ×

- **Mod function**

```
1  •   SELECT * , mod(percentage,100)
2      FROM employees.employees;
```

emp_id	emp_name	emp_job	emp_salary	percentage	mod(percentage,100)
1	Wajahat Imran	Junior Developor	20000	66.55235	66.55235
2	Hamza Kamran	Senior Developor	30000	24.2523452	24.2523452
3	Asad Ali	Web Developor	30000	67.25234	67.25234
4	Samar Ali	Web Developor	45500	37.523423	37.523423
5	Haseeb Ahmed	Wordpress Expert	33400	99.52423	99.52423
6	Ajab Nauman	Machine Learning Engineer	78000	36.523423	36.523423
7	Touseef Ahmad	Wordpress expert	33500	55.2332368	55.2332368

Result 9 ×

- **Left PADDING function**

```
1 •    SELECT * ,LPAD(emp_id,5,'*')
2      FROM employees.employees;
```

emp_id	emp_name	emp_job	emp_salary	percentage	LPAD(emp_id,5,'*')
1	Wajahat Imran	Junior Developor	20000	66.55235	****1
2	Hamza Kamran	Senior Developor	30000	24.2523452	****2
3	Asad Ali	Web Developor	30000	67.25234	****3
4	Samar Ali	Web Developor	45500	37.523423	****4
5	Haseeb Ahmed	Wordpress Expert	33400	99.52423	****5
6	Ajab Nauman	Machine Learning Engineer	78000	36.523423	****6
7	Touseef Ahmad	Wordpress expert	33500	55.2332368	****7

- **Right PADDING function**

```
1 •    SELECT * ,RPAD(emp_id,5,'*')
2      FROM employees.employees;
```

emp_id	emp_name	emp_job	emp_salary	percentage	RPAD(emp_id,5,'*')
1	Wajahat Imran	Junior Developor	20000	66.55235	1****
2	Hamza Kamran	Senior Developor	30000	24.2523452	2****
3	Asad Ali	Web Developor	30000	67.25234	3****
4	Samar Ali	Web Developor	45500	37.523423	4****
5	Haseeb Ahmed	Wordpress Expert	33400	99.52423	5****
6	Ajab Nauman	Machine Learning Engineer	78000	36.523423	6****
7	Touseef Ahmad	Wordpress expert	33500	55.2332368	7****

- **Trim function**

```
1 •    SELECT * ,trim('J' from 'Junior')
2      FROM employees.employees;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

emp_id	emp_name	emp_job	emp_salary	percentage	trim('J' from 'Junior')
1	Wajahat Imran	Junior Developor	20000	66.55235	unior
2	Hamza Kamran	Senior Developor	30000	24.2523452	unior
3	Asad Ali	Web Developor	30000	67.25234	unior
4	Samar Ali	Web Developor	45500	37.523423	unior
5	Haseeb Ahmed	Wordpress Expert	33400	99.52423	unior
6	Ajab Nauman	Machine Learning Engineer	78000	36.523423	unior