SQL Hands On 3

Instruction:

1. Create a query to gell all employees who have more than 25 years of experienced.

```
SELECT EmpNo, EmpName, HireDate, DATEDIFF( "2023-02-28", HireDate )/365 FROM employee_table;
```

Showing rows 0 - 11 (12 total, Query took 0.0003 seconds.)

```
SELECT EmpNo, EmpName, HireDate, DATEDIFF( "2023-02-28", HireDate )/365 FROM employee_table;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

Extra options

←T→	EmpNo	EmpName	HireDate	DATEDIFF("2023-02-28", HireDate)/365
Edit Copy Delete	1001	Scott	1978-01-01 00:00:00.000000	45.1890
Edit Copy Delete	1058	Clark	1978-01-01 00:00:00.000000	45.1890
Edit Copy Delete	1059	Jeff	1978-01-01 00:00:00.000000	45.1890
Edit Copy Delete	1060	Marko	1978-01-01 00:00:00.000000	45.1890
Edit Copy Delete	1065	Bryan	1979-02-04 00:00:00.000000	44.0959
Edit Copy Delete	1066	Frauline	1978-02-08 00:00:00.000000	45.0849
Edit Copy Delete	1067	Phylip	1978-04-15 00:00:00.000000	44.9041
Edit Copy Delete	1068	Ejerson	1978-01-15 00:00:00.000000	45.1507
Edit Copy Delete	1069	Julie	1983-05-12 00:00:00.000000	39.8274
Edit Copy Delete	1070	Russel	1979-03-01 00:00:00.000000	44.0274
Edit Copy Delete	1071	Buboy	1979-03-01 00:00:00.000000	44.0274
Edit Copy Delete	1072	Joseph	1981-01-09 00:00:00.000000	42.1644

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2. Create a query to gell employees whose names are more than 5 character long.

```
SELECT * FROM employee_table WHERE char_length(EmpName)>5;
```

Showing rows 0 - 4 (5 total, Query took 0.0003 seconds.)

```
SELECT * FROM employee_table WHERE char_length(EmpName)>5;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

Extra options

	EmpNo	EmpName	Job	Mgr	HireDate	Salary	Commission	DeptId
Edit Copy Delete	1066	Frauline	Salesman	1060	1978-02-08 00:00:00.000000	4000	600	1002
Edit Copy Delete	1067	Phylip	Salesman	1060	1978-04-15 00:00:00.000000	3300	0	1002
Edit Copy Delete	1068	Ejerson	Clerk	1060	1978-01-15 00:00:00.000000	2400	NULL	1002
Edit Copy Delete	1070	Russel	Analyst	1065	1979-03-01 00:00:00.000000	3400	NULL	1003
Edit Copy Delete	1072	Joseph	Analyst	1065	1981-01-09 00:00:00.000000	3100	NULL	1003

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Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

Query results operations

3. Create a query to display total salary combined with commission of all employees.

```
SELECT EmpName, Commission, Salary + coalesce(Commission, 0) as total_salary
FROM employee_table;
```

Showing rows 0 - 11 (12 total, Query took 0.0003 seconds.)

```
SELECT EmpName, Commission, Salary + coalesce(Commission, 0) as total_salary FROM employee_table;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

Extra options

	EmpName	Commission	total_salary
Edit Copy Delete	Scott	NULL	5000
Edit Copy Delete	Clark	NULL	4000
Edit Copy Delete	Jeff	500	4000
Edit Copy Delete	Marko	NULL	4000
Edit Copy Delete	Bryan	300	3300
Edit Copy Delete	Frauline	600	4600
Edit Copy Delete	Phylip	0	3300
Edit Copy Delete	Ejerson	NULL	2400
Edit Copy Delete	Julie	NULL	2000
Edit Copy Delete	Russel	NULL	3400
Edit Copy Delete	Buboy	NULL	3600
Edit Copy Delete	Joseph	NULL	3100

`coalesce` can be used to specify multiple substitutions for a null value (in order of preference, where if the 2nd is also null, it tries the 3rd, then the 4th, etc. until a not null value is reached) and works in most databases.

4. Create a query to display annual salary of all employees.

```
SELECT SUM(Salary)*12 FROM employee_table;
```

Showing rows 0 - 0 (1 total, Query took 0.0207 seconds.)

```
SELECT SUM(Salary)*12 FROM employee_table;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table

Extra options

SUM(Salary)*12
495600

5. Create a query to display current Date.

Showing rows 0 - 0 (1 total, Query took 0.0132 seconds.)

```
SELECT CURRENT_DATE;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table

Extra options

CURRENT_DATE
2023-02-28

6.Create a query to get all employees who don't get commission.

```
SELECT EmpNo, EmpName , Salary FROM employee_table WHERE Commission IS NULL;
```

Showing rows 0 - 7 (8 total, Query took 0.0003 seconds.)

```
SELECT EmpNo, EmpName , Salary FROM employee_table WHERE Commission IS NULL;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

Extra options

←T→	EmpNo	EmpName	Salary
Edit Copy Delete	1001	Scott	5000
Edit Copy Delete	1058	Clark	4000
Edit Copy Delete	1060	Marko	4000
Edit Copy Delete	1068	Ejerson	2400
Edit Copy Delete	1069	Julie	2000
Edit Copy Delete	1070	Russel	3400
Edit Copy Delete	1071	Buboy	3600
Edit Copy Delete	1072	Joseph	3100

7. Create a query to get all employees whose name contains character 'a'

```
SELECT * FROM employee_table WHERE EmpName LIKE '%A%';
```

Showing rows 0 - 3 (4 total, Query took 0.0003 seconds.)

```
SELECT * FROM employee_table WHERE EmpName LIKE '%A%';
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

Extra options

	EmpNo	EmpName	Job	Mgr	HireDate	Salary	Commission	DeptId
Edit Copy Delete	1058	Clark	Manager	1001	1978-01-01 00:00:00.000000	4000	NULL	1001
Edit Copy Delete	1060	Marko	Manager	1001	1978-01-01 00:00:00.000000	4000	NULL	1003
Edit Copy Delete	1065	Bryan	Salesman	1060	1979-02-04 00:00:00.000000	3000	300	1002
Edit Copy Delete	1066	Frauline	Salesman	1060	1978-02-08 00:00:00.000000	4000	600	1002

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Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

8. Create a query to Get All employees working with the president whose name end with 'o'.

```
SELECT * FROM employee_table WHERE EmpName LIKE '%O%' AND Job="Manager";
```

Showing rows 0 - 0 (1 total, Query took 0.0003 seconds.)

```
SELECT * FROM employee_table WHERE EmpName LIKE '%O%' AND Job="Manager";
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table

Extra options

	EmpNo	EmpName	Job	Mgr	HireDate	Salary	Commission	DeptId
Edit Copy Delete	1060	Marko	Manager	1001	1978-01-01 00:00:00.000000	4000	NULL	1003

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Show all | Number of rows: 25 Filter rows: Search this table

Query results operations

9. Create a query to Get the Min , Max and Average Salary of all the employees.

```
SELECT MIN(Salary), MAX(Salary), AVG(Salary) FROM employee_table;
```

Showing rows 0 - 0 (1 total, Query took 0.0003 seconds.)

```
SELECT MIN(Salary), MAX(Salary), AVG(Salary) FROM employee_table;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table

Extra options

MIN(Salary)	MAX(Salary)	AVG(Salary)
2000	5000	3441.6667

Show all | Number of rows: 25 Filter rows: Search this table

Query results operations

10. Create a query to get the department details of employees working at BGC.

```
SELECT * FROM `department_table` WHERE Location="BGC";
```

Showing rows 0 - 0 (1 total, Query took 0.0003 seconds.)

```
SELECT * FROM `department_table` WHERE Location="BGC";
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table

Extra options

	DeptId	DeptName	Location
Edit Copy Delete	1001	Executive	BGC

Check all *With selected:* Edit Copy Delete Export

Show all | Number of rows: 25 Filter rows: Search this table

11. Create a query to Get the Min , Max and Average Salary of all the employees working in Marketing Department.

```
SELECT MIN(Salary), MAX(Salary), AVG(Salary) FROM employee_table WHERE DeptId="1005";
```

Showing rows 0 - 0 (1 total, Query took 0.0003 seconds.)

```
SELECT MIN(Salary), MAX(Salary), AVG(Salary) FROM employee_table WHERE DeptId="1005";
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table

Extra options

MIN(Salary)	MAX(Salary)	AVG(Salary)
NULL	NULL	NULL

Show all | Number of rows: 25 Filter rows: Search this table

12. Create a query to get the deparment wise maximum, minimum and average salary on employee table(Hint: use Inner Join).

```
SELECT employee_table.DeptId, department_table.DeptName, MIN(Salary), MAX(Salary), AVG(Salary) FROM employee_table INNER JOIN department_table ON employee_table.DeptId=department_table.DeptId GROUP BY DeptId;
```

Showing rows 0 - 2 (3 total, Query took 0.0124 seconds.)

```
SELECT employee_table.DeptId, department_table.DeptName, MIN(Salary), MAX(Salary), AVG(Salary) FROM employee_table INNER JOIN department_table ON employee_table.DeptId=department_table.DeptId GROUP BY DeptId;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table

Extra options

DeptId	DeptName	MIN(Salary)	MAX(Salary)	AVG(Salary)
1001	Executive	4000	5000	4500.0000
1002	Hr	2400	4000	3240.0000
1003	IT	2000	4000	3220.0000

13. Create a query to count total number of employees.

```
SELECT COUNT(EmpNo) FROM `employee_table`;
```

Your SQL query has been executed successfully.

```
SELECT COUNT(EmpNo) FROM `employee_table`;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Extra options

COUNT(EmpNo)
12

14. Create a query to display distinct salaries in employee table.

```
SELECT DISTINCT Salary FROM employee_table;
```

Showing rows 0 - 9 (10 total, Query took 0.0002 seconds.)

```
SELECT DISTINCT Salary FROM employee_table;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

Extra options

←T→	Salary
Edit Copy Delete	5000
Edit Copy Delete	4000
Edit Copy Delete	3500
Edit Copy Delete	3000
Edit Copy Delete	3300
Edit Copy Delete	2400
Edit Copy Delete	2000
Edit Copy Delete	3400
Edit Copy Delete	3600
Edit Copy Delete	3100

15. Create a query to get all employees whose names length is greater than 3 character and less than 5.

```
SELECT * FROM employee_table WHERE char_length(EmpName)>3 AND
char_length(EmpName)=5;
```

Showing rows 0 - 5 (6 total, Query took 0.0003 seconds.)

```
SELECT * FROM employee_table WHERE char_length(EmpName)>3 AND char_length(EmpName)=5;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

Extra options

←T→	EmpNo	EmpName	Job	Mgr	HireDate	Salary	Commission	DeptId
Edit Copy Delete	1001	Scott	President	NULL	1978-01-01 00:00:00.000000	5000	NULL	1001
Edit Copy Delete	1058	Clark	Manager	1001	1978-01-01 00:00:00.000000	4000	NULL	1001
Edit Copy Delete	1060	Marko	Manager	1001	1978-01-01 00:00:00.000000	4000	NULL	1003
Edit Copy Delete	1065	Bryan	Salesman	1060	1979-02-04 00:00:00.000000	3000	300	1002
Edit Copy Delete	1069	Julie	Clerk	1065	1983-05-12 00:00:00.000000	2000	NULL	1003
Edit Copy Delete	1071	Buboy	Analyst	1065	1979-03-01 00:00:00.000000	3600	NULL	1003

Check all With selected: Edit Copy Delete Export

16. Create a query to ger all employees who are getting salary 2000, 3000, 4000, 5000.

```
SELECT * FROM employee_table WHERE Salary>2000 AND Salary <5000;
```

Showing rows 0 - 9 (10 total, Query took 0.0003 seconds.)

```
SELECT * FROM employee_table WHERE Salary>2000 AND Salary <5000;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table Sort by key: None

Extra options

	EmpNo	EmpName	Job	Mgr	HireDate	Salary	Commission	DeptId
Edit Copy Delete	1058	Clark	Manager	1001	1978-01-01 00:00:00.000000	4000	NULL	1001
Edit Copy Delete	1059	Jeff	Manager	1001	1978-01-01 00:00:00.000000	3500	500	1002
Edit Copy Delete	1060	Marko	Manager	1001	1978-01-01 00:00:00.000000	4000	NULL	1003
Edit Copy Delete	1065	Bryan	Salesman	1060	1979-02-04 00:00:00.000000	3000	300	1002
Edit Copy Delete	1066	Frauline	Salesman	1060	1978-02-08 00:00:00.000000	4000	600	1002
Edit Copy Delete	1067	Phylip	Salesman	1060	1978-04-15 00:00:00.000000	3300	0	1002
Edit Copy Delete	1068	Ejerson	Clerk	1060	1978-01-15 00:00:00.000000	2400	NULL	1002
Edit Copy Delete	1070	Russel	Analyst	1065	1979-03-01 00:00:00.000000	3400	NULL	1003
Edit Copy Delete	1071	Buboy	Analyst	1065	1979-03-01 00:00:00.000000	3600	NULL	1003
Edit Copy Delete	1072	Joseph	Analyst	1065	1981-01-09 00:00:00.000000	3100	NULL	1003

Check all With selected: Edit Copy Delete Export

17. Create a query to get the top 5 highest paid employee.

18. Create a query to get the least 5 salaries of employee table.

```
SELECT DISTINCT Salary FROM employee_table ORDER BY Salary DESC LIMIT 5;
```

Showing rows 0 - 4 (5 total, Query took 0.0003 seconds.) [Salary: 5000... - 3400...]

```
SELECT DISTINCT Salary FROM employee_table ORDER BY Salary DESC LIMIT 5;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Extra options

	Salary 1
Edit Copy Delete	5000
Edit Copy Delete	4000
Edit Copy Delete	3600
Edit Copy Delete	3500
Edit Copy Delete	3400

Check all With selected: Edit Copy Delete Export

18. Create a query to get the least 5 salaries of employee table.

```
SELECT DISTINCT Salary FROM employee_table ORDER BY Salary ASC LIMIT 5;
```

Showing rows 0 - 4 (5 total, Query took 0.0003 seconds.) [Salary: 2000... - 3300...]

```
SELECT DISTINCT Salary FROM employee_table ORDER BY Salary ASC LIMIT 5;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Extra options

←T→			Salary ▲ 1
Edit	Copy	Delete	2000
Edit	Copy	Delete	2400
Edit	Copy	Delete	3000
Edit	Copy	Delete	3100
Edit	Copy	Delete	3300

19. Create a query to get the total no departments in the organization.

```
SELECT DeptName, COUNT(employee_table.EmpNo) AS COUNT FROM department_table LEFT OUTER JOIN employee_table ON employee_table.DeptId = department_table.DeptId GROUP BY DeptName;
```

Showing rows 0 - 4 (5 total, Query took 0.0004 seconds.)

```
SELECT DeptName, COUNT(employee_table.EmpNo) AS COUNT FROM department_table LEFT OUTER JOIN employee_table ON employee_table.DeptId =
department_table.DeptId GROUP BY DeptName;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table

Extra options

DeptName	COUNT
Executive	2
Hr	5
IT	5
Marketing	0
Sales	0

20. Create a query to get the Highest paid department with the average salary.

```
SELECT DeptId, AVG(SALARY) AS MAX_AVG_SALARY FROM employee_table GROUP BY DeptId ORDER BY AVG(SALARY) DESC;
```

Showing rows 0 - 2 (3 total, Query took 0.0003 seconds.)

```
SELECT DeptId, AVG(SALARY) AS MAX_AVG_SALARY FROM employee_table GROUP BY DeptId ORDER BY AVG(SALARY) DESC;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table

Extra options

	DeptId	MAX_AVG_SALARY
Edit Copy Delete	1001	4500.0000
Edit Copy Delete	1002	3240.0000
Edit Copy Delete	1003	3220.0000

Check all *With selected:* Edit Copy Delete Export