Husain Trivedi 202300319010105
String:

1. Display length of name and city of each employee.
mysql> select length(name) ,length(address) from emplo;

+	++
length(name)	length(address)
T	++
1 6	9
4	5
5	5
6	9
7	10
6	9
1	1

6 rows in set (0.00 sec)

2. Change name of city to lower case using two ways.
mysql> select ucase(name) from emplo;

```
+----+
| ucase(name) |
+----+
| AKSHAY |
| DEEP |
| NISHA |
| BHAVIK |
| SHANAYA |
| PRISHA |
+----+
6 rows in set (0.01 sec)
```

mysql> select upper(name) from emplo;

```
+----+
| upper(name) |
+----+
| AKSHAY |
| DEEP |
| NISHA |
| BHAVIK |
| SHANAYA |
| PRISHA |
+----+
6 rows in set (0.00 sec)
```

3. Change name of city. to upper case using two ways mysql> select lower(name) from emplo;

```
+----+
| lower(name) |
+----+
| akshay |
| deep |
| nisha |
| bhavik |
| shanaya |
| prisha |
```

```
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+----+
6 rows in set (0.00 sec)
mysql> select lcase(name) from emplo;
+----+
| lcase(name) |
| akshay
| deep
| nisha
| bhavik
| shanaya
| prisha
6 rows in set (0.00 \text{ sec}) \setminus
4. Extract first four characters from each name
mysql> select substr(name, -4, 4) from emplo;
+----+
\mid substr(name, -4,4) \mid
| shay
| Deep
| isha
| avik
| naya
| isha
6 rows in set (0.00 sec)
6. Extract four characters of each name from 2nd position using substr
function.
mysql> select substr(name,2) from emplo;
+----+
| substr(name,2)
| kshay
| eep
| isha
| havik
| hanaya
| risha
6 rows in set (0.00 sec)
7. Dispaly the name and city in one column..
mysql> select concat(name," ",address) from emplo;
+----+
| concat(name," ",address) |
```

8. Replace the "ana" with "aa" in the name column
mysql> select replace(name, "ana", "aa") from emplo;

9. Display the city and name in reverse order.
mysql> select reverse(address), reverse(name) from emplo;

6 rows in set (0.00 sec)

10. Display the ASCII value of name.
mysql> select ascii(name) from emplo;

```
+-----+
| ascii(name) |
+-----+
| 65 |
| 68 |
| 78 |
| 66 |
| 83 |
| 80 |
```

6 rows in set (0.00 sec)

11. Display the first occurance "a" in the name column. mysql> select \* from emplo where name like "a%";

E_id	Name	l age	Address		+   Leave_date	
1 101	Akshay	22	AHMEDABAD	1	2022-08-30	22000
•	n set (0.0			,		

12. Display the details of employee in ascessding order acording to name. mysql> select \* from emplo order by name asc;

E_id	Name	age	+   Address +	Join_date	
101     104     102     103     106	Akshay Bhavik Deep Nisha Prisha Shanaya	22   20   24   26   29	AHMEDABAD   Ahmedabad   SURAT   Delhi   Ahmedabad   Chandigarh	2015-06-22   2022-08-30   2017-05-10   2022-06-23   2017-03-12   2021-05-22   2015-04-22   2020-07-15   2010-07-22   2021-06-12   2010-06-12   2022-05-30	22000     21000     25000     27000     30000

6 rows in set (0.01 sec)

13. Display the details of employee in descending order acording to city. mysql> select \* from emplo order by address desc;

+-	E_id	Name	   age	Address	+   Join_date +	   Leave_date	
	102   103   105   101   104   106	Deep Nisha Shanaya Akshay Bhavik Prisha	24   26   27   22   20   29	SURAT Delhi Chandigarh AHMEDABAD Ahmedabad Ahmedabad	2017-03-12   2015-04-22   2010-06-12   2015-06-22   2017-05-10   2010-07-22	2021-05-22   2020-07-15   2022-05-30   2022-08-30   2022-06-23   2021-06-12	25000   27000   28000   22000   21000   30000

6 rows in set (0.00 sec)

## MATH::

1. Display the maximum, minimum, average, total of the salary from employee table.

mysql> select max(salary), min(salary), avg(salary), sum(salary) from emplo;

	_	min(salary) +				<del>-</del>		
	30000	21000	İ	25500.0000	İ	153000	İ	

+----+

2. Display the mod of the age.

```
mysql> select mod(age, 10.) from emplo;
+----+
| mod(age,10.) |
+----+
           2 |
           6 |
           7 I
6 rows in set (0.00 sec)
Display the salary with the increment of power 2.
mysql> select salary*2 from emplo;
+----+
| salary*2 |
+----+
    44000 |
    50000 I
    54000 |
    42000 I
    56000 |
   60000 I
+----+
6 rows in set (0.00 sec)
Date:
Display duration in days for which employce has worked.
mysql> select dateDiff(curdate(),join date) from emplo;
| dateDiff(curdate(),join date) |
                       3387 |
                       2758 |
                       3448
                       2699 I
                       5223 I
                       5183 |
6 rows in set (0.00 sec)
2. Display Eid, name, joinddate and abbreviated week day name of each
joindate.
mysql> select e id, name, join date, date format(join date, '%W') from emplo
+----+
| e id | name | join date | date format(join date,'%W') |
+----+
| 101 | Akshay | 2015-06-22 | Monday
```

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```
104 | Bhavik | 2017-05-10 | Wednesday
| 105 | Shanaya | 2010-06-12 | Saturday
| 106 | Prisha | 2010-07-22 | Thursday
+----+
6 rows in set (0.00 sec)
3. Display Eid, Ename, joinddate and abbreviated full and half month name
of each joindate.
mysql> select e id, name, join date, date format(join date, '%b') from emplo
+----+
| e id | name | join date | date format(join date, '%b')
| 101 | Akshay | 2015-06-22 | Jun
          | 2017-03-12 | Mar
| 102 | Deep
| 103 | Nisha | 2015-04-22 | Apr
| 104 | Bhavik | 2017-05-10 | May
| 105 | Shanaya | 2010-06-12 | Jun
| 106 | Prisha | 2010-07-22 | Jul
+----
6 rows in set (0.00 sec)
4. Display the details of the employee whose joining year is greater than
mysql> select * from emplo where year(join date)>2010;
+----+
| E_id | Name | age | Address | Join_date | Leave_date | Salary | +----+
| 101 | Akshay | 22 | AHMEDABAD | 2015-06-22 | 2022-08-30 | 22000 |
+----+
4 rows in set (0.00 sec)
5. Display the date and time from the system.
mysql> select curdate();
+----+
       V
| curdate()
+----+
| 2024-09-30 |
+----+
1 row in set (0.00 sec)
mysql> select * from students;
+----
_____
| Student id | First name | Last name | dateofbirth | gender | email
| phone | address | Postal_code | city
+----
-----+
       2 | Afgan | Solanki | 1999-05-05 | Male |
Husain22@qmail.com | 741258963 | S G Highway | 380001 | Ahmedabad |
```

```
3 | Mahek
ABC432@gmail.com | 125478963 | Paldi |
                                           452110 | Ahmedabad |
         4 | Swayam | Ghosht | 1991-08-02 | Male
jhy765@gmail.com | 741258936 | Greenland |
                                           360001 | Rajkot
         5 | Naran
                  | bhatt | 2000-05-31
                                           | Male
1kio98@gmail.com | 785412369 | Greenchowk |
                                            363421 | Limbdi
         1 | Husain
                    | Trivedi | 1979-02-03 | Male
Husaintd2@gmail.com |
                   76983798 | C G Road
                                            363421 | Ahmedabad |
                                      -----+
5 rows in set (0.00 sec)
mysql> select * from professors order by professorid asc;
+-----
--+----+
| Professorid | First name | Last name | Department id | email
| phone
             -----+
          1 | Prince | Solanki
                                           445 | huy768@gmail.com
 123654789 |
          2 | Dhruv
                    | patel
                                           446 |
oiuy876@gmail.com | 879546231 |
                                           447 | plok99@gmail.com
          3 | Krisha
                      | Satya
 852147963 |
                                           448 | uhji22@gmail.com
          4 | Prince
                       | Nokad
 546321897 I
                        jiv
                                           449 | mkjn22@gmail.com
          5 | Vijay
| 825936714 |
5 rows in set (0.00 sec)
mysql> select distinct first_name from professors order by First name
desc;;
| first_name
| Vijay
| Prince
| Krisha
| Dhruv
4 rows in set (0.00 sec)
mysql> select ascii('a');
+----+
| ascii('a') |
        97 I
+----+
1 row in set (0.00 sec)
mysql> select ascii(first name) from students;
```

```
| ascii(first_name) |
  -----+
              65 I
              77 I
              83 I
              78 I
               72 I
   -----+
5 rows in set (0.00 sec)
mysql> select concat(Student_id," ",First name," ",Last name,"
from students;
| concat(Student id, " ", First name, " ", Last name, " ", address)
+----
| 2 Afgan Solanki S G Highway
| 3 Mahek Patel Paldi
| 4 Swayam Ghosht Greenland
| 5 Naran bhatt Greenchowk
| 1 Husain Trivedi C G Road
5 rows in set (0.00 sec)
mysql> select position('I' in first name) from students;
  ----+
| position('I' in first name) |
+----+
                        0 |
                        0
                        0 1
                        0 1
5 rows in set (0.00 sec)
mysql> select replace(email, "com", "co.in") from students;
+----+
| replace(email, "com", "co.in") |
| Husain22@gmail.co.in
| ABC432@gmail.co.in
| jhy765@gmail.co.in
| lkio98@gmail.co.in
| Husaintd2@gmail.co.in
5 rows in set (0.00 sec)
5 rows in set (0.00 sec)
mysql> select replace(city,'Limbdi','Bombay') from students;
+----+
| replace(city,'Limbdi','Bombay') |
| Ahmedabad
| Ahmedabad
| Rajkot
```

```
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```

```
| Bombay
| Ahmedabad
+-----
5 rows in set (0.00 sec)
mysql> select reverse(last name) from professors;
+----+
| reverse(last_name) |
+----+
| iknaloS
| letap
| aytaS
| dakoN
l vii
5 rows in set (0.00 sec)
mysql> select ucase (First name) from professors;
+----+
| ucase(First name) |
+----+
| PRINCE
| DHRUV
| KRISHA
| PRINCE
| VIJAY
5 rows in set (0.00 sec)
mysql> select lcase(email) from professors;
| lcase(email)
+----+
| huy768@gmail.com |
| oiuy876@gmail.com |
| plok99@gmail.com
| uhji22@gmail.com
| mkjn22@gmail.com
+----+
5 rows in set (0.00 sec)
mysql> select length(first name) from professors;
+----+
| length(first_name) |
                6 I
                6 I
5 rows in set (0.00 sec)
```

```
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```

```
mysql> select repeat(city,3) from students;
+----+
| repeat(city,3)
+----+
| AhmedabadAhmedabad |
| AhmedabadAhmedabad |
| RajkotRajkotRajkot
| LimbdiLimbdiLimbdi
| AhmedabadAhmedabad |
+----+
5 rows in set (0.00 sec)
mysql> select substr(first name, 2, 5) from professors;
+----+
| substr(first_name,2,5) |
| rince
| hruv
| risha
| rince
| ijay
5 rows in set (0.00 sec)
mysql> select left(first name,5) from professors;
+----+
| left(first_name,5) |
| Princ
| Dhruv
| Krish
| Princ
| Vijay
5 rows in set (0.00 sec)
mysql> select right(first_name,5) from professors;
+----+
| right(first name,5) |
+----+
| rince
| Dhruv
| risha
| rince
| Vijay
5 rows in set (0.00 sec)
mysql> select avg(marks) from marksheet where studentid=1;
+----+
| avg(marks) |
```

```
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+---+
   45.0000 |
+----+
1 row in set (0.00 sec)
mysql> select sum(marks) from marksheet where studentid=3;
+----+
| sum(marks) |
+----+
        54 |
+----+
1 row in set (0.00 sec)
mysql> select ceil(avg(marks)) from marksheet where studentid=2;
| ceil(avg(marks)) |
+----+
+----+
1 row in set (0.00 sec)
mysql> select floor(avg(marks)) from marksheet where studentid=3;
+----+
| floor(avg(marks)) |
+----+
              54 I
+----+
1 row in set (0.00 sec)
mysql> select max(marks) from marksheet where studentid=3;
+----+
| max(marks) |
+----+
   54 |
+----+
1 row in set (0.00 \text{ sec})
mysql> select min(marks) from marksheet where studentid=1;
| min(marks) |
+----+
| 45 |
1 row in set (0.00 sec)
mysql> select mod(marks,10) from marksheet;
+----+
| mod(marks, 10) |
+----+
            5 I
           8 |
           4 |
            8 |
            7 |
```

```
+----+
5 rows in set (0.00 sec)
mysql> select pow(marks,2) from marksheet;
+----+
| pow(marks,2) |
       2025 I
       3364 |
       2916 |
       3364 |
       7569 |
+----+
5 rows in set (0.00 sec)
mysql> select day(dateofbirth), month(dateofbirth), year(dateofbirth) from
students;
+-----+
| day(dateofbirth) | month(dateofbirth) | year(dateofbirth) |
+----+
                            2 1
            5 |
                             5
                                         1999 I
            21 |
                             8
                                         1995 I
                            8
            2 |
                                         1991 |
+----+
5 rows in set (0.00 sec)
mysql> select sysdate();
| 2024-10-01 00:25:54 |
+-----
1 row in set (0.00 sec)
3. Display the Name and age of the student.
mysql> select
First name, Last name, TIMESTAMPdiff (YEAR, dateofbirth, CURDATE()) from
+-----
| First name | Last name | TIMESTAMPdiff(YEAR, dateofbirth, CURDATE()) |
+-----
| Husain | Trivedi
| Afgan | Solanki
                                                  45 I
                                                  25 I
| Mahek
         | Patel
                                                  29 1
Swayam
         | Ghosht
                                                  33 |
       | bhatt
| Naran
+----
                     _______
5 rows in set (0.00 sec)
```

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4. Display character of ASCII = 97.

mysql> SELECT ASCII('a');

```
+---+
| ASCII('a') |
+----+
       97 |
+----+
1 row in set (0.00 sec)
5. Display the round of 333.44567 till 3 positions.
mysql> select round(333.44567,3);
+----+
| round(333.44567,3) |
+----+
          333.446
+----+
1 row in set (0.00 sec)
6. Display the least & greatest number out of 3456,6789,9876,5432.
mysql> select least(3456,6789,9876,5432);
+----+
| least(3456,6789,9876,5432) |
6. Display the least & greatest number out of 3456,6789,9876,5432.
mysql> select greatest(3456,6789,9876,5432);
+----+
| greatest (3456, 6789, 9876, 5432) |
+-----
1 row in set (0.00 sec)
7. Display the sine and cosine of 4.7.
mysql> select sin(4.7);
+----+
| sin(4.7)
+----
| -0.9999232575641008 |
+----+
1 row in set (0.00 sec)
mysql> select cos(4.7);
| -0.01238866346289056 |
+----+
1 row in set (0.00 sec)
8. Display the value of PI through the math function.
mysql> select pi();
```

```
+----+
| pi()
+----+
| 3.141593 |
+----+
1 row in set (0.00 sec)
9. Add 15 minutes to a date and return the date.
ysql> select date add('1979-5-8', INTErVAL 15 Minute);
+----+
| date add('1979-5-8',INTErVAL 15 Minute) |
+----+
1 1979-05-08 00:15:00
+----+
1 row in set (0.00 sec)
10. Add 15 DAYS to DATE OF BIRTH and return the date.
mysql> select date add(dateofbirth, INTErVAL 15 day) from students;
+----+
| date add(dateofbirth, INTErVAL 15 day) |
| 1979-02-18
| 1999-05-20
| 1995-09-05
I 1991-08-17
| 2000-06-15
5 rows in set (0.00 sec)
12. Return the day of the month for a date: 2017-06-15.
mysql> select date_format('2017-6-15','%W');
+----+
| date format('2017-6-15','%W') |
+----+
| Thursday
+----+
1 row in set (0.00 sec)
13. Return the day of the month for the current system date.
mysql> select date format(curdate(),'%W');
+----+
| date format(curdate(),'%W') |
+----+
| Tuesday
+----+
1 row in set (0.00 sec)
TASK 3:
Airline database
```

```
List the details of Flights table
mysql> select * from flights;
+----+
| flno | from city | to city | distance | departs | arrives | price |
+----+
| 1 | Dubai
           | Afghanistan |
                                        5000 |
                        10 |
                               1 |
nb45
   2 | Karachi | Delhi |
                                     13 | 10000 |
                       200 |
                                9 |
fs65
     | 3 | Houston | Rajkot |
                        900 |
                               14 |
fe55
| 4 | Russia | ukraine |
                        600 |
dw55
    1
   5 | Ahmedabad | Torento |
                        200 |
                                      6 | 3000 |
d25
+----+
5 rows in set (0.00 sec)
Increase the prices by 50 percent in the Flight Table of all Rows.
ysql> select price*2 from flights;
+----+
| price*2 |
+----+
  10000 |
  20000 |
  4000 |
  8000 |
  6000 I
+----+
5 rows in set (0.00 sec)
Display the details of Flight from "Chennai"
sql> select * from flights where from city="chennai";
+----+
| flno | from city | to city | distance | departs | arrives | price |
flightname |
+---+
1 | chennai | Afghanistan | 10 | 1 | 8 | 5000
+----+
1 row in set (0.00 sec)
• Delete the rows whose flno is 10 in the Flights table.
```

<sup>•</sup> Delete the rows whose flno is 10 in the Flights table ysql> select \* from flights where flno=10;

```
+----+
+----+
| flno | from city | to city | distance | departs | arrives | price |
flightname |
+----+
+----+
           | Afghanistan | 10 |
| 10 | Dubai
nb45
+----+
1 row in set (0.00 sec)
• Display employees whose salary is more than 10,000
ysql> select * from emp where salary>=10000;
+----+
| eid | ename
            | salary |
+----+
 11 | Maharshi | 10000 |
 13 | Krishna | 20000 |
  14 | Ashish | 30000 |
  15 | Harsh | 40000 |
+----+
4 rows in set (0.00 sec)
Display the result by Adding three columns
"from city", "to city", "distance" into one "Flight details" column.
sql> select concat(from city, " ", to city, " ", distance) as flights details
from flights;
+----
| flights details
+----
| Dubai Afghanistan 10
| Karachi Delhi 200
| Houston Rajkot 900
| Russia ukraine 600
| Ahmedabad Torento 200 |
+----+
5 rows in set (0.00 sec)
Display the previous result by Extracting 2 characters from the "from
city" and "to city" column (starting from left) and instead of distance,
add "price" column with "-" separator into one "Price
List" column.
mysql> select left(from city,2),left(to city,2),concat(price,'-
price list') from flights;
+----+
| left(from city,2) | left(to city,2) | concat(price,'-price list') |
+----+
| Du
              | Af
                           | 5000-price list
```

```
| De
                             | 10000-price list
l Ka
                              | 2000-price list
l Ho
                l Ra
| Ru
                | uk
                              | 4000-price list
                              | 3000-price list
| Ah
                l To
5 rows in set (0.00 sec)
· Display Flightname and price of flights having maximum price out of all
flights.
ysql> select flightname, price from flights where price=(select max(price)
from flights)
  -> ;
+----+
| flightname | price |
+----+
| fs65 | 10000 |
+----+
1 row in set (0.00 sec)
• Display details of all the employees.
mysql> select * from employee;
+----+
| Emp id | First name | Lastname | Hiredate
                                      | city
deptno | salary |
----+
    1 | Husain
                 | Trivedi | 2007-08-07 | Banglore | 45 |
87 | 20000 |
                 | SOlanki
                           | 1999-05-09 | Chennai |
                                                   87 I
2 | AAkash
14 | 10000 |
    3 | Magsad
                  | aamir | 1996-07-02 | Hydrabad | 88 |
19 | 40000 |
    4 | Nasir
                   Solanki | 1999-05-04 | Kathmandu |
                                                     55 I
84 | 45000 |
    5 | Prince
                | Patel | 1954-08-04 | Kolkatta | 58 |
81 | 74000 |
---+----+
5 rows in set (0.00 sec)
• Increase salary of all employees by 12% in Employee.
mysql> update employee set salary=(salary*12)/100;
Query OK, 5 rows affected (0.01 sec)
Rows matched: 5 Change
d: 5
• Drop the city column.
mysql> alter table employee drop column city;
Query OK, 0 rows affected (0.02 sec)
```

List the details of those employees whose salary is more than 25000. mysql> select \* from employee where salary>25000;

Records: 0 Duplicates: 0 Warnings: 0

-+					1	
	name   Lastnar	ne   Hired	ate   de	signo   c	deptno	salary
-+   1   Husai		i   2007-	·	45		
2   AAkas	sh   SOlank:	L   1999-	05-09	87	14	48000
3   Maqsa	ıd   aamir	1996-	07-02	88	19	48000
   4   Nasir	Solank:	1   1999-	05-04	55	84	48000
   5   Princ	ce   Patel	1954-	08-04	58	81	48000
	+		. 1			
-+ 5 rows in set (0		+	~		+	
mysql> delete fr Query OK, 2 rows List the Employ mysql> select *	ree who are in from employee	l sec) the city 'i	Bangalore'	.d";		
-++   Emp_id   First	_name   Lastnar	0),	ate   de			
city		1	1	1		
City	h   Patel	1998-	05-04	87	14	47000
++   2   AAkas   Banglore   ++ 1 row in set (0.  • List the Emplo mysql> select *	on sec)  Patel  On sec)  On sech  One of the sech sech sech sech sech sech sech se	1998- + who are in where city:	n the city	87   + 7 'Ahmedak	14   +	47000
++   2   AAkas   Banglore   ++ 1 row in set (0.  • List the Emplo mysql> select * ++	on sec)  Patel  On sec)  On sech  One of the sech sech sech sech sech sech sech se	1998- + who are in where city:	n the city	87   + 7 'Ahmedak	14   +	47000
++   2   AAkas   Banglore   ++ 1 row in set (0.  • List the Emplo mysql> select *	on sec)  one patel  on	who are involved the city where city where city are   Hireda	n the city ="Ahmedaba	87   + 	14	47000  salary

```
1 row in set (0.00 sec)
```

14 | 48000 |

```
• Display firstname of all the employees returning ASCII values.
mysql> select ascii(First name) from employee;
+----+
| ascii(First name) |
+----+
          72 |
          65 I
          77 I
          78 |
         80 I
+----+
5 rows in set (0.00 sec)
mysql> select concat(first name, " ", first name) from employee where
city="Ahmedabad";
+----+
| concat(first_name," ",first_name) |
+----+
| AAkash AAkash
+----+
1 row in set (0.00 sec)
mysql> select * from employee where first name like '%o%';
-+----
| Emp id | First name | Lastname | Hiredate | designo | deptno | salary
                 | 1 | Nobita | Trivedi | 2007-08-07 | 45 | 87 | 48000
| Banglore |
            --+----
-+----
1 row in set (0.00 sec)
• Display details of all the employees returning in uppercase.
mysql> select ucase(First name) as firstname, ucase(Lastname) as
last name, ucase (city) as city, emp id, Hiredate, designo, deptno, salary from
employee;
----+-----+
| firstname | last name | city | emp id | Hiredate | designo |
deptno | salary |
----+
87 | 48000 |
```

MAQSAD 19   48000	AAMIR	NULL		3   1996	-07-02		88
NASIR		NULL	I	4   1999	-05-04		55
81   48000	PATEL 	NULL	'	5   1954		I	58
+		+	+	+		+	+
5 rows in set		2)					
• Display det mysql> selectity, lcase(s	ct project_	id,lcase(g	proj_name om design	e) as proje nation;			city) as
project_id	•	_name   cit	ty	status			
10   13	lkh	ahr   dha	medabad ari	on going on going			
Search for t mysql> select	t * from er	nployee whe					+
-+   Emp_id   Fi   city +	irst_name	Lastname		ate   des			_
-+	obita 			)8-07   +			
-+	-+		'	ı	ı		ı
1 row in set	(0.00 sec)						
32,							

Husain Mitinedia Dago Sagan Sa