

## SQL PROJECT

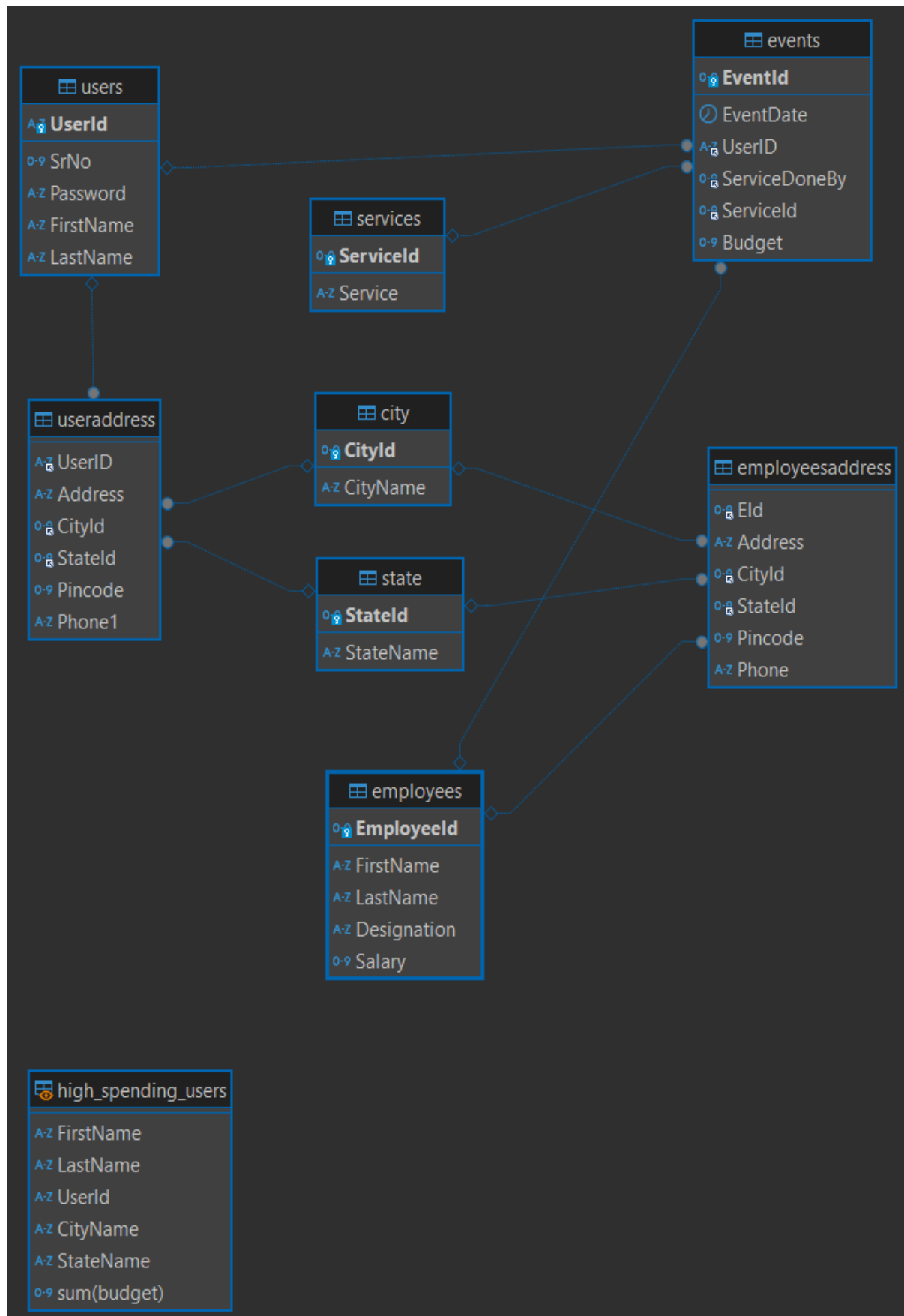
### Photography Services

Name: Sagar Nangare

Available Tables:

1. Users
2. Users Address
3. Employees
4. Employees Address
5. Events
6. Services
7. City
8. State

## ER Diagram:



## 1. Create a Table named UserLogin.

```
create table UserLogin
(SrNo int,
UserId varchar(50) primary key,
Password varchar(50),
Name varchar(50));

desc userlogin ;
```

COLUMNS 1 ×

desc userlogin Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z Field	A-Z Type	A-Z Null	A-Z Key	A-Z Default	A-Z Extra
1	SrNo	int(11)	YES		[NULL]	
2	UserId	varchar(50)	NO	PRI	[NULL]	
3	Password	varchar(50)	YES		[NULL]	
4	Name	varchar(50)	YES		[NULL]	

## 2. Rename table UserLogin to UserData.

```
rename table userlogin to userdata;

desc userdata;
```

COLUMNS 1 ×

desc userdata Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z Field	A-Z Type	A-Z Null	A-Z Key	A-Z Default	A-Z Extra
1	SrNo	int(11)	YES		[NULL]	
2	UserId	varchar(50)	NO	PRI	[NULL]	
3	Password	varchar(50)	YES		[NULL]	
4	Name	varchar(50)	YES		[NULL]	

### 3. Drop the column name.

```
alter table userdata drop name;  
  
desc userdata;
```

COLUMNS 1 ×

desc userdata | *Enter a SQL expression to filter results (use Ctrl+Space)*

	A-Z Field	A-Z Type	A-Z Null	A-Z Key	A-Z Default	A-Z Extra	
1	SrNo	int(11)	YES		[NULL]		
2	UserId	varchar(50)	NO	PRI	[NULL]		
3	Password	varchar(50)	YES		[NULL]		

### 4. Add column Name in userdata table.

```
desc userdata;  
  
alter table userdata  
add Name varchar(50);
```

COLUMNS 1 ×

desc userdata | *Enter a SQL expression to filter results (use Ctrl+Space)*

	A-Z Field	A-Z Type	A-Z Null	A-Z Key	A-Z Default	A-Z Extra	
1	SrNo	int(11)	YES		[NULL]		
2	UserId	varchar(50)	NO	PRI	[NULL]		
3	Password	varchar(50)	YES		[NULL]		
4	Name	varchar(50)	YES		[NULL]		

5. Change column 'Name' to 'FirstName' and add new column 'LastName'.

```
alter table userdata
change Name
FirstName varchar(20);

alter table userdata
add LastName varchar(50);

desc userdata;
```

COLUMNS 1 ×

desc userdata | *Enter a SQL expression to filter results (use Ctrl+Space)*

	A-Z Field	A-Z Type	A-Z Null	A-Z Key	A-Z Default	A-Z Extra
1	SrNo	int(11)	YES		[NULL]	
2	UserId	varchar(50)	NO	PRI	[NULL]	
3	Password	varchar(50)	YES		[NULL]	
4	FirstName	varchar(20)	YES		[NULL]	
5	LastName	varchar(50)	YES		[NULL]	

6. Change the Column 'FirstName' datatype varchar(50)

```
desc userdata;

alter table userdata
modify FirstName varchar(50);
```

COLUMNS 1 ×

desc userdata | *Enter a SQL expression to filter results (use Ctrl+Space)*

	A-Z Field	A-Z Type	A-Z Null	A-Z Key	A-Z Default	A-Z Extra
1	SrNo	int(11)	YES		[NULL]	
2	UserId	varchar(50)	NO	PRI	[NULL]	
3	Password	varchar(50)	YES		[NULL]	
4	FirstName	varchar(50)	YES		[NULL]	
5	LastName	varchar(50)	YES		[NULL]	

## 7. Insert values in table UserData.

```
insert into userdata(SrNo, UserId, Password, FirstName, LastName)
values(1, 'ara12@abc.com', 'A1b2C3d4', 'Aarav', 'Sharma'),
(2, 'sitaven@abc.com', 'P@ssw0rd', 'Sita', 'Venkatesh'),
(3, 'divchat@abc.com', 'R3d!F1sh', 'Divya', 'Chatterjee'),
(4, 'bhatara@abc.com', '$ecure9A', 'Tara', 'Bhalla'),
(5, 'mehta23@abc.com', 'M!x3dB@', 'Akash', 'Mehta');

select * from userdata;
```

userdata 1 ×

select \* from userdata | Enter a SQL expression to filter results (use Ctrl+Space)

	0-9 SrNo ↑	A-Z UserId	A-Z Password	A-Z FirstName	A-Z LastName	
1	1	ara12@abc.com	A1b2C3d4	Aarav	Sharma	
2	2	sitaven@abc.com	P@ssw0rd	Sita	Venkatesh	
3	3	divchat@abc.com	R3d!F1sh	Divya	Chatterjee	
4	4	bhatara@abc.com	\$ecure9A	Tara	Bhalla	
5	5	mehta23@abc.com	M!x3dB@	Akash	Mehta	

## 8. Change the Specific value of column.

```
select * from userdata;

update userdata
set LastName = 'Bhat'
where SrNo = 4;
```

userdata 1 ×

select \* from userdata | Enter a SQL expression to filter results (use Ctrl+Space)

	0-9 SrNo ↑	A-Z UserId	A-Z Password	A-Z FirstName	A-Z LastName	
1	1	ara12@abc.com	A1b2C3d4	Aarav	Sharma	
2	2	sitaven@abc.com	P@ssw0rd	Sita	Venkatesh	
3	3	divchat@abc.com	R3d!F1sh	Divya	Chatterjee	
4	4	bhatara@abc.com	\$ecure9A	Tara	Bhat	
5	5	mehta23@abc.com	M!x3dB@	Akash	Mehta	

9. Delete the row where SrNo = 5.

```
delete from userdata
where srno = 5;
```

userdata 1 ×

select \* from userdata | Enter a SQL expression to filter results (use Ctrl+Space)

	0-9 SrNo ↑	A-Z UserId	A-Z Password	A-Z FirstName	A-Z LastName	
1	1	ara12@abc.com	A1b2C3d4	Aarav	Sharma	
2	2	sitaven@abc.com	P@ssw0rd	Sita	Venkatesh	
3	3	divchat@abc.com	R3d!F1sh	Divya	Chatterjee	
4	4	bhatara@abc.com	\$ecure9A	Tara	Bhat	

10. Delete the userdata using Truncate.

```
truncate table userdata;

select * from userdata;
```

userdata 1 ×

select \* from userdata | Enter a SQL expression to filter results (use Ctrl+Space)

	0-9 SrNo	A-Z UserId	A-Z Password	A-Z FirstName	A-Z LastName	

## 11. Add foreign key in table UserAddress.

```
ALTER TABLE useraddress
ADD CONSTRAINT FK_UserId
FOREIGN KEY (UserId)
REFERENCES UserLogin (UserId)
ADD CONSTRAINT FK_CityId
FOREIGN KEY (CityId)
REFERENCES City (CityId)
ADD CONSTRAINT FK_StateId
FOREIGN KEY (StateID)
REFERENCES State(StateId);

desc useraddress ;
```

COLUMNS 1 ×

desc useraddress | Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z Field	A-Z Type	A-Z Null	A-Z Key	A-Z Default	A-Z Extra
1	UserID	varchar(50)	YES	MUL	[NULL]	
2	Address	varchar(50)	YES		[NULL]	
3	CityId	int(11)	YES	MUL	[NULL]	
4	StateId	int(11)	YES	MUL	[NULL]	
5	Pincode	int(11)	YES		[NULL]	
6	Phone1	varchar(15)	YES		[NULL]	

## 12. Write a query to retrieve the current date using CURDATE() and alias the result as "Today\_Date".

```
select date_format(current_date(), '%D %M, %Y') as TODAY_DATE;
```

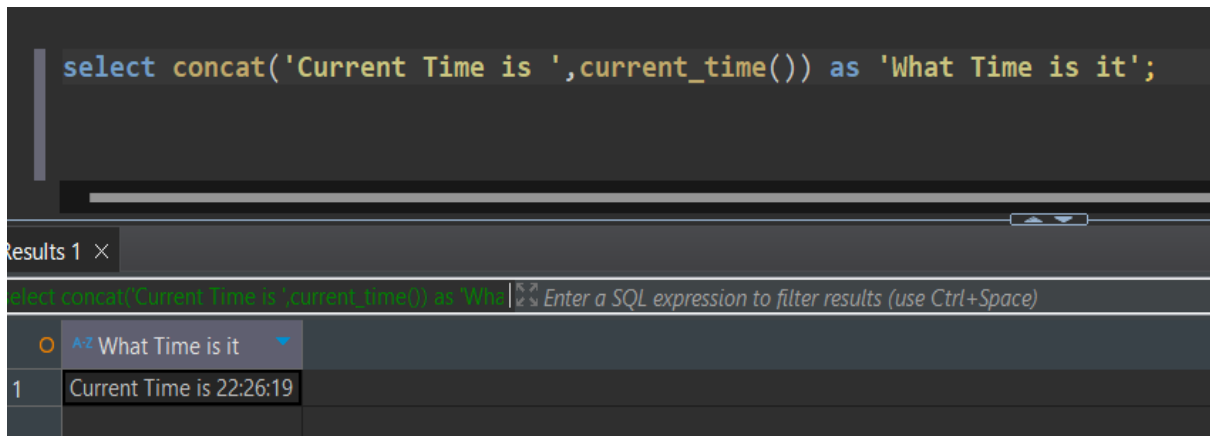
Results 1 ×

select date\_format(current\_date(), '%D %M, %Y') as TO | Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z TODAY_DATE
1	2nd September, 2024



13. Write a query display the current time along with a custom message, like "Current Time is [current time]".



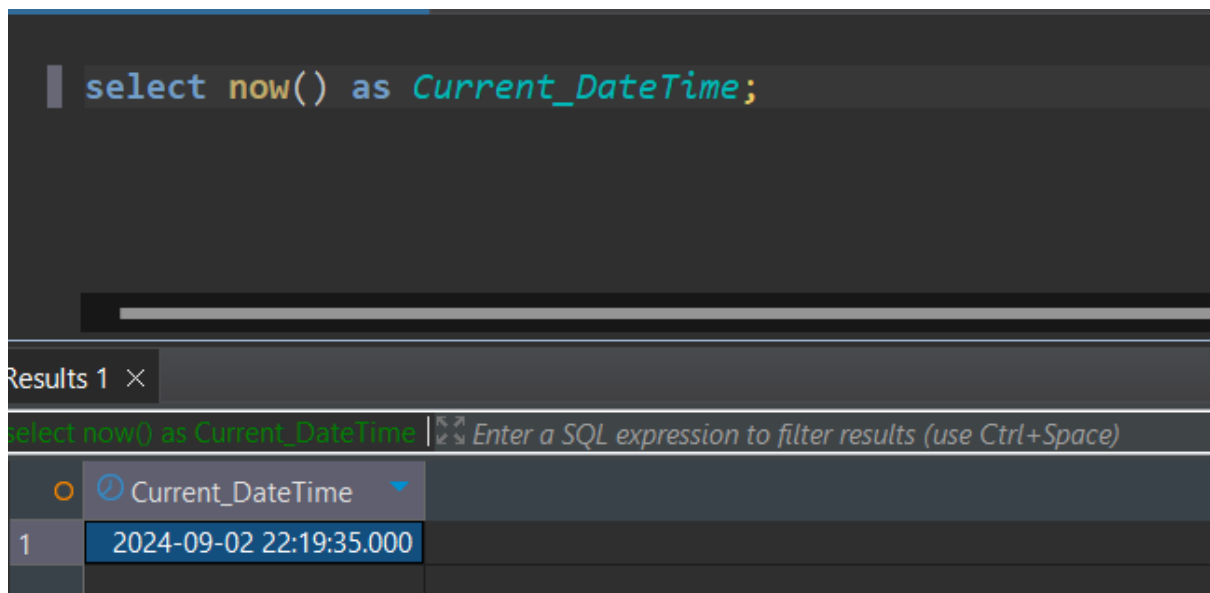
```
select concat('Current Time is ',current_time()) as 'What Time is it';
```

Results 1 ×

select concat('Current Time is ',current\_time()) as 'What Time is it' | Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z What Time is it
1	Current Time is 22:26:19

14. Write a query to display the current date and time using the NOW() function.



```
select now() as Current_DateTime;
```

Results 1 ×

select now() as Current\_DateTime | Enter a SQL expression to filter results (use Ctrl+Space)

	⌚ Current_DateTime
1	2024-09-02 22:19:35.000

15. Display the current month.

```
select month(now()) as 'Current Month';
```

Results 1 ×

select month(now()) as 'Current Month' | Enter a SQL expression to filter results (use Ctrl+S)

	0-9 Current Month
1	9

16. Display the current year.

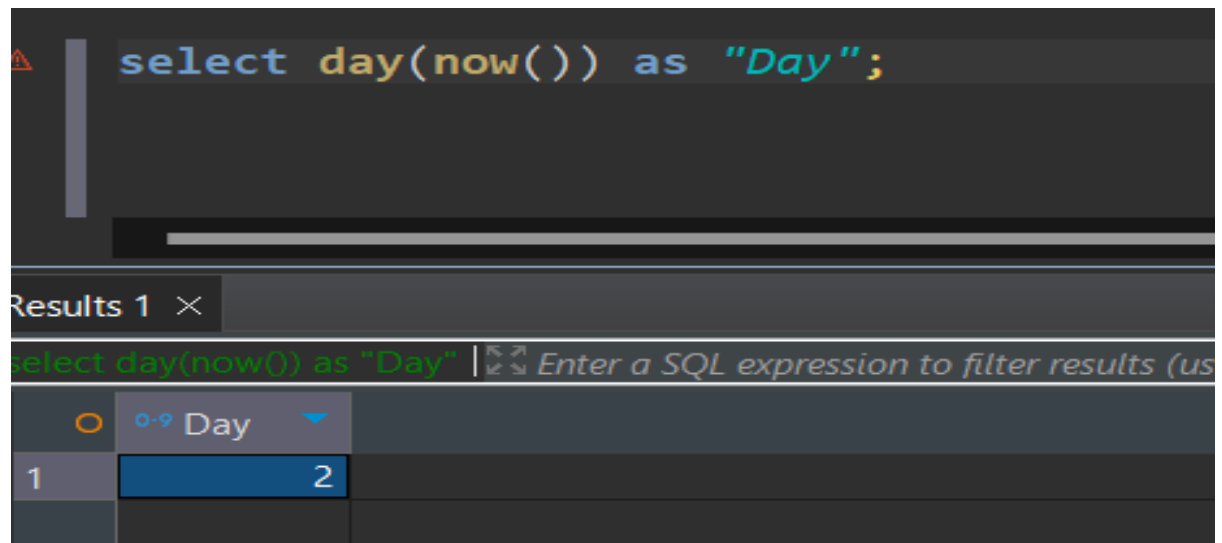
```
select year(now()) as 'Current Year';
```

Results 1 ×

select year(now()) as 'Current Year' | Enter a SQL expression to filter results (use Ctrl+S)

	0-9 Current Year
1	2,024

17. Display the current day.



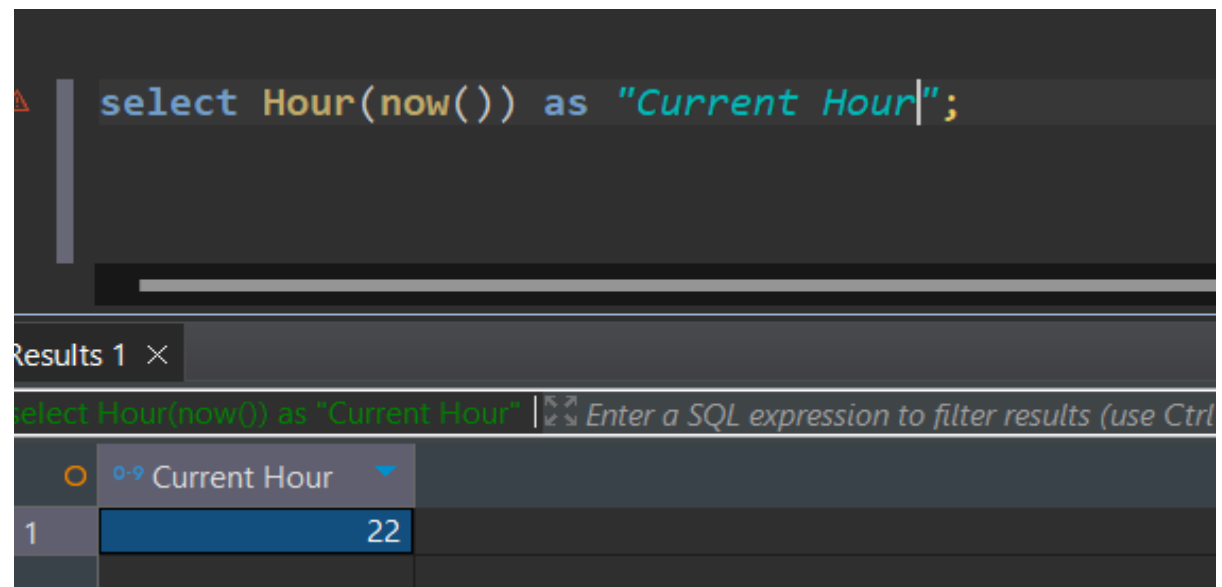
The screenshot shows a SQL query editor with the following query:

```
select day(now()) as "Day";
```

Below the query editor, the results are displayed in a table. The table has a single column named "Day" and one row with the value 2.

	Day
1	2

18. Display the current hour.



The screenshot shows a SQL query editor with the following query:

```
select Hour(now()) as "Current Hour";
```

Below the query editor, the results are displayed in a table. The table has a single column named "Current Hour" and one row with the value 22.

	Current Hour
1	22

19. Display the current minute.

```
select minute(now()) as "Current Minute";
```

results 1 ×

select minute(now()) as "Current Minute" | Enter a SQL expression to filter results (use Ctrl+)

	0-9 Current Minute ▾
1	57

20. Display the current second.

```
select second(now()) as "Current second";
```

Results 1 ×

select second(now()) as "Current second" | Enter a SQL expression to filter results (use

	0-9 Current second ▾
1	25

21. Display the date difference.

```
select datediff(now(),'2023-09-02') as 'Date Difference';
```

Results 1 ×

select datediff(now(),'2023-09-02') as 'Date Difference' | Enter a SQL expression to filter results (use Ctrl+Space)

	0-9 Date Difference
1	366

22. Write a query to find the ceil of 7.2.

```
select ceil(7.2) as Ceil;
```

Results 1 ×

select ceil(7.2) as ceil | Enter a SQL expression to filter results (use Ctrl+Space)

	0-9 ceil
1	8

23. Write a query to find the floor of 9.7.

```
select floor(7.2) as Floor;
```

results 1 ×

select floor(7.2) as Floor | *Enter a SQL expression to filter results (use Ctrl+Space)*

	0-9 Floor
1	7

24. Write a query to find the round value of 123.456789.

```
select round(123.456789) as Round;
```

Results 1 ×

select round(123.456789) as Round | *Enter a SQL expression to filter results (use Ctrl+Space)*

	0-9 Round
1	123

24. Write a query to find the absolute difference between two values: (5 - 10)

```
select abs(5 - 10) as Absolute_Difference;
```

results 1 ×

select abs(5 - 10) as Absolute\_Difference | *Enter a SQL expression to filter results (use Ctrl+Space)*

	0-9 Absolute_Difference
1	5

25. Find the remainder when 29 is divided by 4.

```
select mod(29,4) as Remainder;
```

results 1 ×

select mod(29,4) as Remainder | *Enter a SQL expression to filter results (use Ctrl+Space)*

	0-9 Remainder
1	1

26. Calculate the cube of the number 5.

```
select pow(5,3) as Cube;
```

Results 1 ×

select pow(5,3) as Cube | Enter a SQL expression to filter results (use Ctrl+Space)

	0-9 Cube ▼
1	125

27. Write a query to find the square root of 81.

```
select sqrt(81) as Square_Root;
```

Results 1 ×

select sqrt(81) as Square\_Root | Enter a SQL expression to filter results (use Ctrl+Sp

	0-9 Square_Root ▼
1	9



28. Write a query to display all the data from event where budget is more than 50,000.

```
select * from events
where Budget > 50000;
```

events 1 ×

select \* from events where Budget > 50000 | Enter a SQL expression to filter results (use Ctrl+Space)

	EventId	EventDate	UserID	ServiceDoneBy	ServiceId	Budget
1	3	2023-03-24	menon45@abc.com	4	5	90,000
2	4	2023-04-15	sahil545@abc.com	1	3	63,000
3	7	2023-07-29	menon45@abc.com	14	6	63,000
4	19	2024-08-09	ara12@abc.com	3	4	81,000

29. Write a query to display all the data from users where first name starts from letter 'A'.

```
select * from users
where FirstName like 'A%';
```

users 1 ×

select \* from users where FirstName like 'A%' | Enter a SQL expression to filter results (use Ctrl+Space)

	SrNo	UserId	Password	FirstName	LastName
1	1	ara12@abc.com	A1b2C3d4	Aarav	Sharma
2	5	mehta23@abc.com	M!x3dB@	Akash	Mehta
3	10	aryan321@abc.com	9r0ck5t!	Aryan	Mahatre

30. Write a query to display first name and last name in one column, user id and password where last name starts with letter m.

```
select concat(FirstName,' ',LastName) as Fullname,
UserId as EmailId,
Password
from users u
where LastName like 'm%';
```

users 1 x

select concat(FirstName,' ',LastName) as Fullname, User | Enter a SQL expres

	Fullname	EmailId	Password
1	Aryan Mahatre	aryan321@abc.com	9r0ck5t!
2	Akash Mehta	mehta23@abc.com	M!x3dB@
3	Isha Menon	menon45@abc.com	S@feP@55

31. Write a query to display the all data from employees of videographer whose salary is more than 15000.

```
select * from employees e
where Salary > 15000
and Designation like '%Video%';
```

employees 1 x

select \* from employees | Enter a SQL expression to filter results (use Ctrl+S)

	EmployeeId	FirstName	LastName	Designation	Salary
1	4	Priti	Gowda	Videographer	19,000
2	10	Ayush	Deshmukh	Juiner Video Grapher	16,000

32. Write an SQL query to select the name, designation, and salary from the employees table where the salary is less than 15,000 or also designation is 'videographer'.

```
select FirstName as Name, Designation, Salary from employees e where salary < 15000  
or Designation = 'videographer';
```

employees 1 ×

select FirstName as Name, Designation, Salary from employees e Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z Name	A-Z Designation	Salary
1	Naresh	Photo Editor	14,000
2	Priti	Videographer	19,000
3	Nakul	Photo Editor	14,000
4	Mahi	Junior Video Editor	12,523
5	Aarti	Photo Editor	14,000
6	Jayesh	Camera Operators	12,000
7	Krish	Camera Operators	12,000
8	Ajeey	Videographer Trainee	10,000

33. Write an SQL query to select all columns from the services table except the Service is 'portfolio'.

```
select * from services s  
where not Service='portfolio';
```

services 1 ×

select \* from services s Enter a SQL expression to filter results (use Ctrl+S)

	ServiceId	Service
1	1	Birthday Party
2	2	Couple Portraits
3	3	Family Portraits
4	4	Outdoor Portraits
5	6	Wedding Photoshoot

34. Write a query to display the events whose budget is between 30,000 to 40,000.

```
select * from events e
where Budget between 30000 and 40000;
```

events 1 ×

select \* from events e | Enter a SQL expression to filter results (use Ctrl+Space)

	EventId	EventDate	UserID	ServiceDoneBy	ServiceId	Budget
1	1	2023-02-20	rajt147@abc.com	1	6	36,000
2	6	2023-06-14	bhatara@abc.com	9	3	35,000
3	13	2024-02-04	sitaven@abc.com	1	1	32,000
4	18	2024-07-09	aryan321@abc.com	4	5	32,000

35. Write a query to display the highest salary for each designation in the employee's table.

```
select Designation, max(salary) from employees e
group by Designation order by Salary desc;
```

employees 1 ×

select Designation, max(salary) | Enter a SQL expression to filter results (use Ctrl+Space)

	Designation	max(salary)
1	Videographer	19,000
2	Events Photographer	18,000
3	Portrait Photographer	16,000
4	Juonor Video Grapher	16,000
5	Video Editor	15,000
6	Photo Editor	14,000
7	Juonor Video Editor	12,523
8	Camera Operators	12,000
9	Videographer Trainee	10,000

36. Write a query to display the minimum budget from event.

```
select min(budget) from events e;
```

Results 1 ×

select min(budget) from | Enter a SQL expression to filter results (use Ctrl+S) |

	min(budget)
1	10,000

37. Write a query to calculate the average salary from the employee's table.

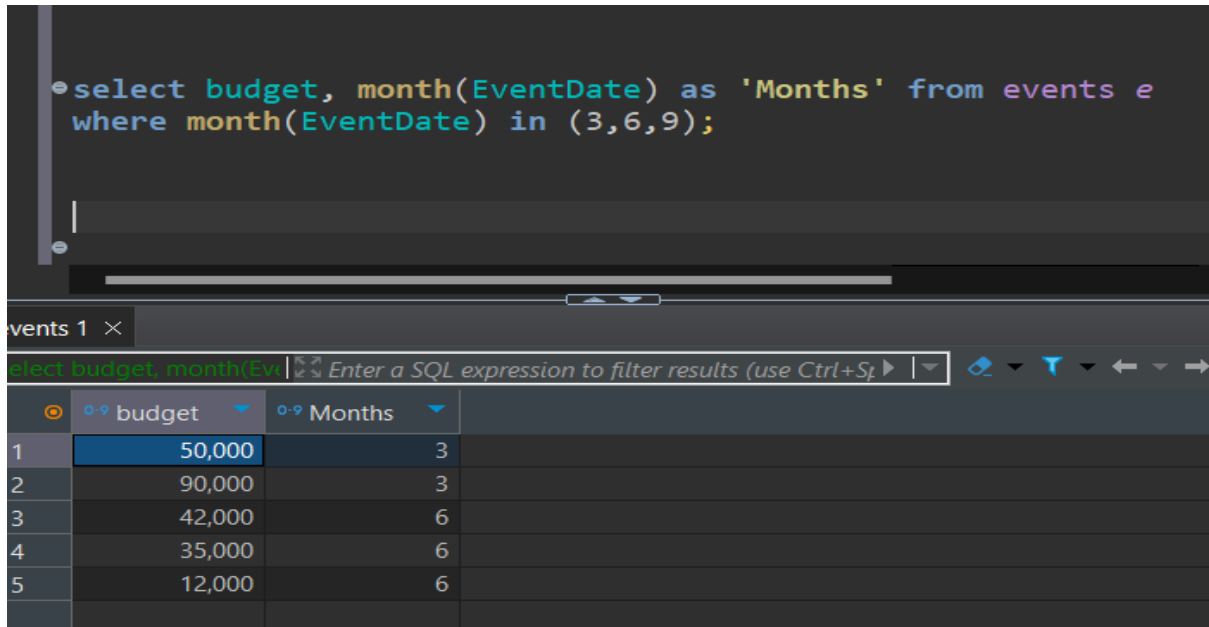
```
select avg(Salary) from employees e;
```

Results 1 ×

select avg(Salary) from employees e | Enter a SQL expression to filter results (use Ctrl+S) |

	avg(Salary)
1	14,968.2

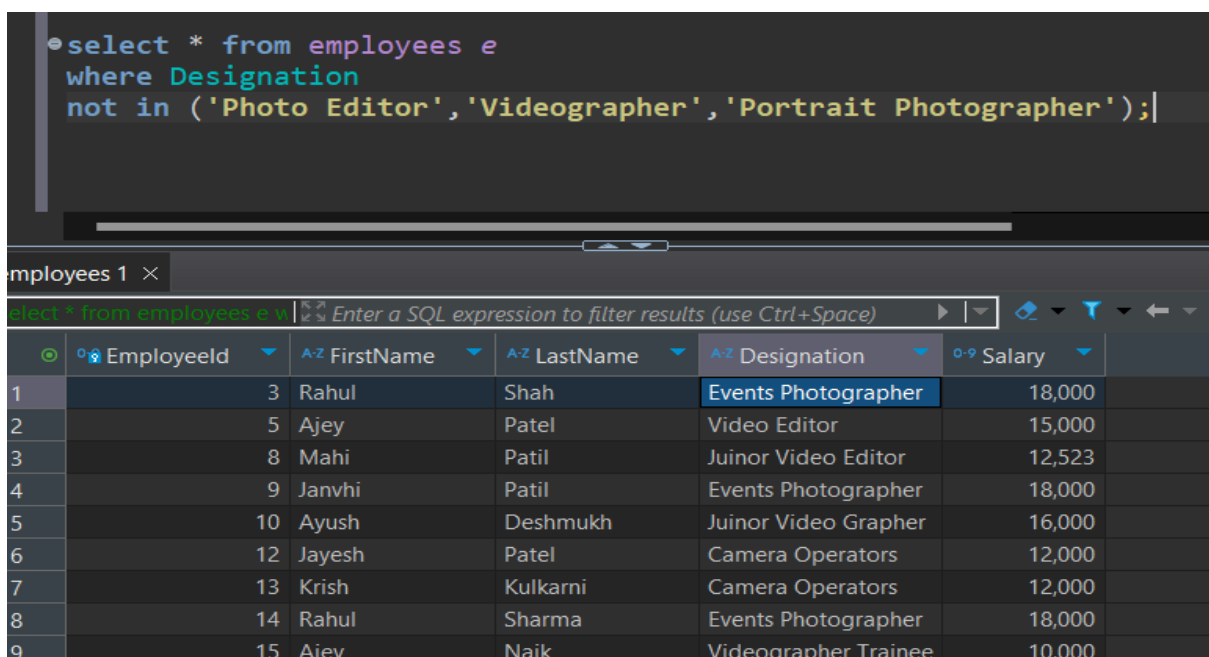
38. Write a query to find the budget and corresponding month for events that occurred in March, June, or September.



```
select budget, month(EventDate) as 'Months' from events e
where month(EventDate) in (3,6,9);
```

	budget	Months
1	50,000	3
2	90,000	3
3	42,000	6
4	35,000	6
5	12,000	6

39. Write an SQL query to retrieve all columns from the employees table for employees whose designation is not 'Photo Editor', 'Videographer', 'Portrait Photographer'.



```
select * from employees e
where Designation
not in ('Photo Editor','Videographer','Portrait Photographer');
```

	EmployeeId	FirstName	LastName	Designation	Salary
1	3	Rahul	Shah	Events Photographer	18,000
2	5	Ajeay	Patel	Video Editor	15,000
3	8	Mahi	Patil	Junior Video Editor	12,523
4	9	Janvi	Patil	Events Photographer	18,000
5	10	Ayush	Deshmukh	Junior Video Grapher	16,000
6	12	Jayesh	Patel	Camera Operators	12,000
7	13	Krish	Kulkarni	Camera Operators	12,000
8	14	Rahul	Sharma	Events Photographer	18,000
9	15	Ajeay	Naik	Videographer Trainee	10,000

40. Write a query of all users who are associated with events that have a budget over 50,000 and are scheduled on or before January 1, 2024.

```
SELECT FirstName, LastName, UserId
FROM users u
WHERE UserId IN (
    SELECT UserId
    FROM events e
    WHERE budget > 50000
    AND eventdate <= STR_TO_DATE('1/1/2024', '%d/%m/%Y')
);
```

users 1 ×

SELECT FirstName, LastName, UserId FROM users u W Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z FirstName	A-Z LastName	A-Z UserId	
1	Isha	Menon	menon45@abc.com	
2	Sahil	Dixit	sahil545@abc.com	

41. Write a query to retrieve of users who are located in the state of 'Maharashtra' using inner join.

```
SELECT u.FirstName as Name, c.cityname as City, u.UserId as EmailId, ua.Phone1
FROM users u
INNER JOIN useraddress ua on u.userid = ua.userid
INNER JOIN city c on ua.cityid = c.cityid
INNER JOIN state s on ua.stateid = s.stateid
WHERE s.StateName = 'Maharashtra';
```

users(+) 1 ×

SELECT u.FirstName as Name, c.cityname as City, u.UserId as EmailId, ua.Phone1 Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z Name	A-Z City	A-Z EmailId	A-Z Phone1	
1	Aarav	Navi Mumbai	ara12@abc.com	+91 9876543210	
2	Sita	Mumbai	sitaven@abc.com	+91 91234 56789	
3	Sahil	Navi Mumbai	sahil545@abc.com	+91 99999 88888	
4	Nikhil	Pune	nik555@abc.com	+91 98765 67890	

42. Write a query to list each user's first name, last name, address, and phone number, including users who do not have an address or phone number recorded.

```
SELECT u.firstname, u.lastname, ua.address, ua.Phone1
FROM users u
LEFT JOIN useraddress ua ON u.userid = ua.userid;
```

users(+) 1 ×

SELECT u.firstname, u.lastname, ua.address, ua.Phone1 | Enter a SQL expression to filter results (use Ctrl+Space)

	A-Z firstname	A-Z lastname	A-Z address	A-Z Phone1	
1	Aarav	Sharma	123, Main Street	+91 9876543210	
2	Aryan	Mahatre	222, Hills	+91 91567 89012	
3	Tara	Bhalla	9, Place	+91 98000 12345	
4	Divya	Chatterjee	78, Nagar	+91 99876 54321	
5	Akash	Mehta	55, Beach Road	+91 98234 56789	
6	Isha	Menon	89, Nagar	+91 92000 12345	
7	Nikhil	Chaudhary	101,Phase 3	+91 98765 67890	
8	Raj	Thakur	34, Residency Road	+91 90123 45678	
9	Sahil	Dixit	123, Main Street	+91 99999 88888	
10	Sita	Venkatesh	Maharaj Street	+91 91234 56789	



43. Create a view named `high_spending_users` that lists users who have a total budget greater than the average budget of all events, including their first name, last name, user ID, city name, and state name. Then, retrieve all records from this view.

```
create view high_spending_users as
select FirstName
, LastName
, u.UserId
, CityName
, StateName
, sum(budget)
from users u
left join useraddress ua
on u.UserId = ua.UserID
left join city c
on ua.CityId = c.CityId
left join state s
on ua.StateId = s.StateId
left join events e
on u.UserId = e.UserID
where budget > (select avg(budget) from events e2)
group by u.UserId

select * from high_spending_users hsu |
```

Users(+) 1 ×

select \* from high\_spending\_users hsu | Enter a SQL expression to filter results (use Ctrl+Space)

	FirstName	LastName	UserId	CityName	StateName	sum(budget)	
1	Aarav	Sharma	ara12@abc.com	Navi Mumbai	Maharashtra	81,000	
2	Tara	Bhalla	bhatara@abc.com	Banglore	Karnataka	42,000	
3	Isha	Menon	menon45@abc.com	Mangalore	Karnataka	203,000	
4	Sahil	Dixit	sahil545@abc.com	Navi Mumbai	Maharashtra	63,000	
5	Sita	Venkatesh	sitaven@abc.com	Mumbai	Maharashtra	50,000	