Q1.

```sql
--Question 1
SELECT
    h.HKID AS EmployeeID,
    e.Fname AS FirstName,
    e.Lname AS LastName,
    h.Status,
    h.Shift
FROM
    dbo.HOUSEKEEPER h
INNER JOIN dbo.EMPLOYEE e ON h.HKID = e.EmpID
WHERE
    h.Status = 'Temp' AND
    e.Hiredate > '2018-01-01';
```

100 %

▦ Results   ▣ Messages

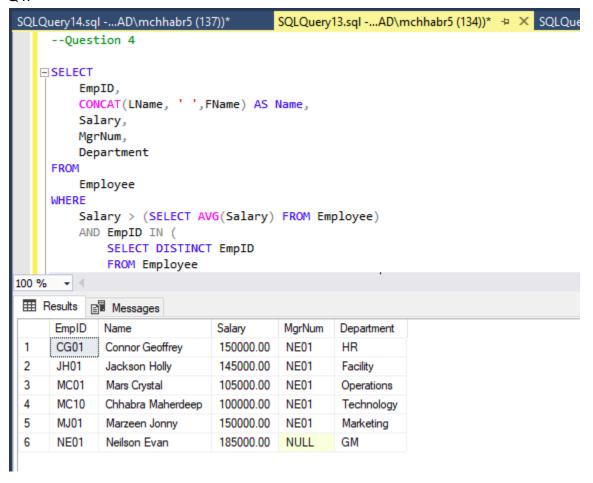|	EmployeeID	FirstName	LastName	Status	Shift
1	JP01	Jenny	Patel	Temp	Shift 2
2	LA01	Amy	Lopez	Temp	Shift 3

Q2.

```sql
--Question 2
SELECT
    g.FName + ' ' + g.LName AS 'Guest Name',
    e.Fname  AS 'Guide',
    r.ResID AS 'Reservation ID',
    r.Rdate AS 'Reservation Date',
    r.ActID AS 'Activity ID'
FROM
    dbo.RESERVATION r
INNER JOIN
    dbo.GUEST g ON r.GuestID = g.GuestID
INNER JOIN
    dbo.GUIDE gu ON r.GuideID = gu.GuideID
INNER JOIN
    dbo.EMPLOYEE e ON gu.GuideID = e.EmpID
WHERE
    g.LName = 'Montana'
    AND (e.Fname = 'Gayle')
ORDER BY
    r.ResID ASC;
```

100 %

Results   Messages

	Guest Name	Guide	Reservation ID	Reservation Date	Activity ID
1	Ben Montana	Gayle	16	2022-07-13	B9
2	Ben Montana	Gayle	65	2021-07-11	B9
3	Ben Montana	Gayle	122	2023-07-13	B9

Q3.

```sql
SELECT
    ActivityDetails.ActID AS 'Activity ID',
    ActivityDetails.Description,
    ActivityDetails.ReservationCount AS 'Total Reservation Count',
    ActivityDetails.TotalParticipants AS 'Total Participant',
    CAST(ActivityDetails.PPP AS DECIMAL(10,2)) AS PPP,
    ActivityDetails.TotalActivityAmount AS 'Total Activity Amount'
FROM (
    SELECT
        a.ActID,
        a.Description,
        COUNT(*) AS ReservationCount,
        SUM(r.NumberInParty) AS TotalParticipants,
        AVG(a.PPP) AS PPP,
        SUM(r.NumberInParty * a.PPP) AS TotalActivityAmount,
        DENSE_RANK() OVER (ORDER BY COUNT(*) DESC) AS rnk
    FROM
        dbo.RESERVATION r
    INNER JOIN
        dbo.ACTIVITY a ON r.ActID = a.ActID
    WHERE
        YEAR(r.RDate) = 2021
    GROUP BY
        a.ActID, a.Description
) AS ActivityDetails
WHERE
    ActivityDetails.rnk <= 3;
```

	Activity ID	Description	Total Reservation Count	Total Participant	PPP	Total Activity Amount
1	R8	Lower Gore Creek	5	23	25.00	575.00
2	H3	Spruce Saddle Loop	4	18	5.00	90.00
3	HB1	4 Eagle Ranch	3	15	30.00	450.00
4	B4	Vail Village	3	14	10.00	140.00
5	HB5	Westfield River Loop	3	13	30.00	390.00
6	R1	Upper Colorado River	3	14	25.00	350.00

Q4.

```
--Question 4

SELECT
    EmpID,
    CONCAT(LName, ' ',FName) AS Name,
    Salary,
    MgrNum,
    Department
FROM
    Employee
WHERE
    Salary > (SELECT AVG(Salary) FROM Employee)
    AND EmpID IN (
        SELECT DISTINCT EmpID
        FROM Employee
```

100 %   ▾ ◂

▦ Results   ▣ Messages

	EmpID	Name	Salary	MgrNum	Department
1	CG01	Connor Geoffrey	150000.00	NE01	HR
2	JH01	Jackson Holly	145000.00	NE01	Facility
3	MC01	Mars Crystal	105000.00	NE01	Operations
4	MC10	Chhabra Maherdeep	100000.00	NE01	Technology
5	MJ01	Marzeen Jonny	150000.00	NE01	Marketing
6	NE01	Neilson Evan	185000.00	NULL	GM

Q5.

```sql
--Question 5
SELECT
    GUEST.GuestID,
    GUEST.FName,
    GUEST.LName,
    GUEST.SpouseFName,
    FAMILY.GuestID AS Children
FROM
    dbo.GUEST
LEFT JOIN Family ON GUEST.GuestID=FAMILY.GuestID
WHERE
    State LIKE 'CA'
    AND FAMILY.GuestID IS NULL;
```

100 %

Results | Messages

	GuestID	FName	LName	SpouseFName	Children
1	G24	Tony	Miles	Lesly	NULL
2	G25	Vance	Applegate	Tammy	NULL
3	G26	Robert	Sanghi	Sally	NULL

Q6.

```sql
--Question 6
SELECT
    g.GuestID,
    g.FName AS Fname,
    g.LName AS Lname,
    g.SpouseFName AS Spousefname
FROM
    dbo.GUEST g
WHERE
    g.State = 'CA'
    AND g.GuestID NOT IN (
        SELECT f.GuestID
        FROM dbo.FAMILY f
    );
```

100 %

Results | Messages

	GuestID	Fname	Lname	Spousefname
1	G24	Tony	Miles	Lesly
2	G25	Vance	Applegate	Tammy
3	G26	Robert	Sanghi	Sally

Q7.

```
--Question 7
SELECT
    g.GuestID,
    g.FName AS Fname,
    g.LName AS Lname,
    g.SpouseFName AS Spousefname
FROM
    dbo.GUEST g
WHERE
    g.State = 'CA'
    AND NOT EXISTS (
        SELECT 1
        FROM dbo.FAMILY f
        WHERE f.GuestID = g.GuestID
    );
```

100 %

Results   Messages

	GuestID	Fname	Lname	Spousefname
1	G24	Tony	Miles	Lesly
2	G25	Vance	Applegate	Tammy
3	G26	Robert	Sanghi	Sally

Q8.
Step 1

SQLQuery8.sql - w...AD\mchhabr5 (123))* ⊢ ✕ SQLQuery7.sql - w...AD

```sql
--Question 8 Part 1
SELECT
    bldgnum,
    unitnum
FROM
    CONDO
WHERE
    bldgnum = 'C'
    AND unitnum LIKE '3%'
    AND bdrms = 2;
```

100 % ▼ ◁

▦ Results 📄 Messages

	bldgnum	unitnum
1	C	301
2	C	302
3	C	304

Step 2

```sql
--Question 8 Step 2
SELECT GuestID, StartDate, EndDate, UnitNum
FROM BOOKING
WHERE YEAR(StartDate)=2022
AND CONCAT(BldgNum, UnitNum) IN (
SELECT CONCAT(BldgNum, UnitNum)
FROM
    CONDO
WHERE
    bldgnum = 'C'
    AND unitnum LIKE '3%'
    AND bdrms = 2
);
```

100 % ▾ ◂

⊞ Results ▤ Messages

	GuestID	StartDate	EndDate	UnitNum
1	G14	2022-06-10	2022-06-17	302
2	G17	2022-05-20	2022-05-27	304
3	G23	2022-08-26	2022-09-02	302

Q9.

```sql
--Question 9
SELECT
    e.EmpID,
    CONCAT(e.FName, ' ', e.LName) AS Name,
    COUNT(*) AS ReservationCount
FROM
    Reservation r
LEFT JOIN
    Employee e ON r.EmpID = e.EmpID
WHERE
    YEAR(r.Rdate) = 2023
GROUP BY
    e.EmpID, CONCAT(e.FName, ' ', e.LName);
```

100 %

Results | Messages

	EmpID	Name	ReservationCount
1	NULL		43
2	MC01	Crystal Mars	1
3	CG01	Geoffrey Connor	1
4	JH01	Holly Jackson	4
5	JJ01	Joy Judas	1
6	OL01	Luke Olson	1

Q10.

```sql
--Question 10
SELECT
    CONCAT(e.FName, ' ' , e.Lname) AS 'Employee Name',
    e.Department AS 'Department',
    e.Hiredate AS 'Employee Hire Date',
    CONCAT(m.FName, ' ' , m.Lname) AS 'Manager Name',
    m.Hiredate AS 'Manager Hire Date'
FROM
    Employee e
LEFT JOIN
    Employee m ON e.MgrNum = m.EmpID
WHERE
    e.EType LIKE 'G';
```

100 %

Results | **Messages**

	Employee Name	Department	Employee Hire Date	Manager Name	Manager Hire Date
1	Miles Abrams	Operations	2012-06-03	Zach Gregory	2012-11-04
2	Rita Boyers	Operations	2012-03-04	Sonny Kingman	2014-07-06
3	Harley Devon	Operations	2012-01-08	Sonny Kingman	2014-07-06
4	Zach Gregory	Operations	2012-11-04	Crystal Mars	2013-06-03
5	Susan Kiley	Operations	2013-04-08	Zach Gregory	2012-11-04
6	Sam Kelly	Operations	2013-06-10	Lori Stevens	2014-06-04
7	Sonny Kingman	Operations	2014-07-06	Crystal Mars	2013-06-03
8	Crystal Mars	Operations	2013-06-03	Evan Neilson	2010-06-03
9	Ray Marston	Operations	2013-09-14	Susan Kiley	2013-04-08
10	Hal Rowan	Operations	2014-05-02	Lori Stevens	2014-06-04
11	Lori Stevens	Operations	2014-06-04	Crystal Mars	2013-06-03
12	Gayle Unser	Operations	2014-07-01	Susan Kiley	2013-04-08