

Part B

```
mysql> select * from Employee_Details;
```

EMPNO	ENAME	DATA_OF_JOINING	SAL_NUMBER	DEPTNAME
1001	Sanket	2025-01-01	8000	HR
1002	Parth	2023-01-19	4000	Software Developer
1003	Krishna	2023-06-19	4000	SDE
1004	Abhinav	2024-06-15	19000	Tester
1005	Rohit	2022-03-10	12000	Marketing
1006	Ankit	2021-08-21	15000	Finance
1007	Vivek	2023-11-01	9500	Sales
1008	Karan	2024-12-05	11000	Support
1009	Suresh	2023-09-15	10500	HR
1010	Amit	2025-02-28	8000	Software Developer
1011	Manish	2023-05-22	13500	SDE
1012	Rahul	2024-07-07	14500	Tester
1013	Rakesh	2022-04-30	10000	Marketing
1014	Deepak	2023-10-19	14000	Finance
1015	Sanjay	2024-01-12	11500	Sales

```
15 rows in set (0.00 sec)
```

```
mysql> SELECT DISTINCT DEPTNAME FROM Employee_Details;
```

DEPTNAME
HR
Software Developer
SDE
Tester
Marketing
Finance
Sales
Support

```
8 rows in set (0.00 sec)
```

```
mysql> select * from Employee_Details ORDER BY SAL_NUMBER ASC;;
```

EMPNO	ENAME	DATA_OF_JOINING	SAL_NUMBER	DEPTNAME
1002	Parth	2023-01-19	4000	Software Developer
1003	Krishna	2023-06-19	4000	SDE
1001	Sanket	2025-01-01	8000	HR
1010	Amit	2025-02-28	8000	Software Developer
1007	Vivek	2023-11-01	9500	Sales
1013	Rakesh	2022-04-30	10000	Marketing
1009	Suresh	2023-09-15	10500	HR
1008	Karan	2024-12-05	11000	Support
1015	Sanjay	2024-01-12	11500	Sales
1005	Rohit	2022-03-10	12000	Marketing
1011	Manish	2023-05-22	13500	SDE
1014	Deepak	2023-10-19	14000	Finance
1012	Rahul	2024-07-07	14500	Tester
1006	Ankit	2021-08-21	15000	Finance
1004	Abhinav	2024-06-15	19000	Tester

```
mysql> select * from Employee_Details ORDER BY SAL_NUMBER ASC;;
```

EMPNO	ENAME	DATA_OF_JOINING	SAL_NUMBER	DEPTNAME
1002	Parth	2023-01-19	4000	Software Developer
1003	Krishna	2023-06-19	4000	SDE
1001	Sanket	2025-01-01	8000	HR
1010	Amit	2025-02-28	8000	Software Developer
1007	Vivek	2023-11-01	9500	Sales
1013	Rakesh	2022-04-30	10000	Marketing
1009	Suresh	2023-09-15	10500	HR
1008	Karan	2024-12-05	11000	Support
1015	Sanjay	2024-01-12	11500	Sales
1005	Rohit	2022-03-10	12000	Marketing
1011	Manish	2023-05-22	13500	SDE
1014	Deepak	2023-10-19	14000	Finance
1012	Rahul	2024-07-07	14500	Tester
1006	Ankit	2021-08-21	15000	Finance
1004	Abhinav	2024-06-15	19000	Tester

```
15 rows in set (0.00 sec)
```

```
ERROR:
No query specified
```

```
mysql> select * from Employee_Details where DATE_OF_JOINING < '1981-01-01';
ERROR 1054 (42S22): Unknown column 'DATE_OF_JOINING' in 'where clause'
```

```
mysql> select * from Employee_Details where DATE_OF_JOINING < '1981-01-01';
ERROR 1054 (42S22): Unknown column 'DATE_OF_JOINING' in 'where clause'
```

```
mysql> SELECT * FROM Employee_Details WHERE DATE_OF_JOINING < '1981-01-01';
Empty set (0.00 sec)
```

```
mysql> SELECT * FROM Employee_Details
-> WHERE YEAR(DATA_OF_JOINING) = 1981;
Empty set (0.00 sec)
```

```
mysql> SELECT AVG(SAL_NUMBER) AS Average_Salary FROM Employee_Details;
```

Average_Salary
10966.6667

```
1 row in set (0.04 sec)
```

```
mysql> SELECT MIN(SAL_NUMBER) AS Min_Salary, MAX(SAL_NUMBER) AS Max_Salary FROM Employee_Details;
```

Min_Salary	Max_Salary
4000	19000

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

```
mysql> SELECT * FROM Employee_Details
-> WHERE ENAME LIKE 'P%';
```

```
mysql> SELECT * FROM Employee_Details
-> WHERE ENAME LIKE 'P%';
+-----+-----+-----+-----+-----+
| EMPNO | ENAME | DATA_OF_JOINING | SAL_NUMBER | DEPTNAME |
+-----+-----+-----+-----+-----+
| 1002 | Parth | 2023-01-19 | 4000 | Software Developer |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> SELECT * FROM Employee_Details
-> WHERE ENAME LIKE '%a';
+-----+-----+-----+-----+-----+
| EMPNO | ENAME | DATA_OF_JOINING | SAL_NUMBER | DEPTNAME |
+-----+-----+-----+-----+-----+
| 1003 | Krishna | 2023-06-19 | 4000 | SDE |
+-----+-----+-----+-----+-----+
1 row in set (0.01 sec)

mysql> SELECT MAX(SAL_NUMBER) AS Second_Highest_Salary
-> FROM Employee_Details
-> WHERE SAL_NUMBER < (SELECT MAX(SAL_NUMBER) FROM Employee_Details);
+-----+
| Second_Highest_Salary |
+-----+
| 15000 |
+-----+
1 row in set (0.04 sec)

mysql> SELECT * FROM Employee_Details WHERE SAL_NUMBER >= 10000;
+-----+-----+-----+-----+-----+
| EMPNO | ENAME | DATA_OF_JOINING | SAL_NUMBER | DEPTNAME |
+-----+-----+-----+-----+-----+
| 1004 | Abhinav | 2024-06-15 | 19000 | Tester |
| 1005 | Rohit | 2022-03-10 | 12000 | Marketing |
| 1006 | Ankit | 2021-08-21 | 15000 | Finance |
| 1008 | Karan | 2024-12-05 | 11000 | Support |
| 1009 | Suresh | 2023-09-15 | 10500 | HR |
| 1011 | Manish | 2023-05-22 | 13500 | SDE |
| 1012 | Rahul | 2024-07-07 | 14500 | Tester |
| 1013 | Rakesh | 2022-04-30 | 10000 | Marketing |
| 1014 | Deepak | 2023-10-19 | 14000 | Finance |
| 1015 | Sanjay | 2024-01-12 | 11500 | Sales |
+-----+-----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql> SELECT DEPTNAME, MAX(SAL_NUMBER) AS Max_Salary
-> FROM Employee_Details
-> GROUP BY DEPTNAME;
+-----+-----+
| DEPTNAME | Max_Salary |
+-----+-----+
| HR | 10500 |
| Software Developer | 8000 |
| SDE | 13500 |
| Tester | 19000 |
| Marketing | 12000 |
| Finance | 15000 |
| Sales | 11500 |
| Support | 11000 |
+-----+-----+
```

```
mysql> SELECT DEPTNAME, MAX(SAL_NUMBER) AS Max_Salary
-> FROM Employee_Details
-> GROUP BY DEPTNAME;
+-----+-----+
| DEPTNAME | Max_Salary |
+-----+-----+
| HR | 10500 |
| Software Developer | 8000 |
| SDE | 13500 |
| Tester | 19000 |
| Marketing | 12000 |
| Finance | 15000 |
| Sales | 11500 |
| Support | 11000 |
+-----+-----+
8 rows in set (0.00 sec)

mysql> UPDATE Employee_Details
-> SET SAL_NUMBER = SAL_NUMBER * 1.10;
Query OK, 15 rows affected (0.04 sec)
Rows matched: 15 Changed: 15 Warnings: 0

mysql> SELECT e.ENAME AS Employee_Name, e.DEPTNAME AS Department, e.SAL_NUMBER * 1.10 AS Increased_Salary
-> FROM Employee_Details e;
+-----+-----+-----+
| Employee_Name | Department | Increased_Salary |
+-----+-----+-----+
| Sanket | HR | 9680.00 |
| Parth | Software Developer | 4840.00 |
| Krishna | SDE | 4840.00 |
| Abhinav | Tester | 22990.00 |
| Rohit | Marketing | 14520.00 |
| Ankit | Finance | 18150.00 |
| Vivek | Sales | 11495.00 |
| Karan | Support | 13310.00 |
| Suresh | HR | 12705.00 |
| Amit | Software Developer | 9680.00 |
| Manish | SDE | 16335.00 |
| Rahul | Tester | 17545.00 |
| Rakesh | Marketing | 12100.00 |
| Deepak | Finance | 16940.00 |
| Sanjay | Sales | 13915.00 |
+-----+-----+-----+
15 rows in set (0.00 sec)

mysql>
```


Part A

```
Aug 6 16:55
sanket-kotkar@sanket-kotkar-VirtualBox: ~

mysql> select * from Movies;
+-----+-----+-----+-----+
| Id | Title           | Director      | Year | Length_minutes |
+-----+-----+-----+-----+
| 1 | Toy Story       | John Lasseter | 1995 | 81              |
| 2 | A Bug's Life    | John Lasseter | 1998 | 95              |
| 3 | Toy Story 2     | John Lasseter | 1999 | 93              |
| 4 | Monsters, Inc.  | Pete Docter   | 2001 | 92              |
| 5 | Finding Nemo    | Andrew Stanton | 2003 | 107             |
| 6 | The Incredibles | Brad Bird     | 2004 | 116             |
| 7 | Cars            | John Lasseter | 2006 | 117             |
| 8 | Ratatouille     | Brad Bird     | 2007 | 115             |
| 9 | WALL-E          | Andrew Stanton | 2008 | 104             |
| 10 | Up              | Pete Docter   | 2009 | 101             |
| 11 | Toy Story 3     | Lee Unkrich   | 2010 | 103             |
| 12 | Cars 2          | John Lasseter | 2011 | 120             |
| 13 | Brave           | Brenda Chapman | 2012 | 102             |
| 14 | Monsters University | Dan Scanlon | 2013 | 110             |
+-----+-----+-----+-----+
14 rows in set (0.01 sec)

mysql> select * from Boxoffice;
+-----+-----+-----+-----+
| Movie_id | Rating | Domestic_sales | International_sales |
+-----+-----+-----+-----+
| 5 | 8.2 | 380843261 | 555900000 |
| 14 | 7.4 | 268492764 | 475066843 |
| 8 | 8.0 | 206445654 | 417277164 |
| 12 | 6.4 | 191452396 | 368400000 |
| 3 | 7.9 | 245852179 | 239163000 |
| 7 | 8.0 | 261441092 | 370001000 |
| 9 | 8.5 | 223808164 | 297503696 |
+-----+-----+-----+-----+
```

```
Aug 6 16:56
sanket-kotkar@sanket-kotkar-VirtualBox: ~

+-----+-----+-----+-----+
| 5 | 8.2 | 380843261 | 555900000 |
| 14 | 7.4 | 268492764 | 475066843 |
| 8 | 8.0 | 206445654 | 417277164 |
| 12 | 6.4 | 191452396 | 368400000 |
| 3 | 7.9 | 245852179 | 239163000 |
| 7 | 8.0 | 261441092 | 370001000 |
| 9 | 8.5 | 223808164 | 297503696 |
+-----+-----+-----+-----+
7 rows in set (0.00 sec)

mysql> SELECT m.Title, b.Domestic_sales, b.International_sales
-> FROM Movies m
-> JOIN Boxoffice b ON m.Id = b.Movie_id;
+-----+-----+-----+
| Title           | Domestic_sales | International_sales |
+-----+-----+-----+
| Finding Nemo    | 380843261      | 555900000           |
| Monsters University | 268492764      | 475066843           |
| Ratatouille     | 206445654      | 417277164           |
| Cars 2          | 191452396      | 368400000           |
| Toy Story 2     | 245852179      | 239163000           |
| Cars            | 261441092      | 370001000           |
| WALL-E          | 223808164      | 297503696           |
+-----+-----+-----+
7 rows in set (0.01 sec)

mysql> SELECT m.Title, b.Domestic_sales, b.International_sales
-> FROM Movies m
-> JOIN Boxoffice b ON m.Id = b.Movie_id
-> WHERE b.International_sales > b.Domestic_sales;
+-----+-----+-----+
| Title           | Domestic_sales | International_sales |
+-----+-----+-----+
```

```
Aug 6 16:57
sanket-kotkar@sanket-kotkar-VirtualBox: ~

-> JOIN Boxoffice b ON m.Id = b.Movie_id
-> WHERE b.International_sales > b.Domestic_sales;
+-----+-----+-----+
| Title           | Domestic_sales | International_sales |
+-----+-----+-----+
| Finding Nemo    | 380843261      | 555900000           |
| Monsters University | 268492764      | 475066843           |
| Ratatouille     | 206445654      | 417277164           |
| Cars 2          | 191452396      | 368400000           |
| Cars            | 261441092      | 370001000           |
| WALL-E          | 223808164      | 297503696           |
+-----+-----+-----+
6 rows in set (0.00 sec)

mysql> SELECT m.Title, b.Rating
-> FROM Movies m
-> JOIN Boxoffice b ON m.Id = b.Movie_id
-> ORDER BY b.Rating DESC;
+-----+-----+
| Title           | Rating |
+-----+-----+
| WALL-E          | 8.5    |
| Finding Nemo    | 8.2    |
| Ratatouille     | 8.0    |
| Cars            | 8.0    |
| Toy Story 2     | 7.9    |
| Monsters University | 7.4    |
| Cars 2          | 6.4    |
+-----+-----+
7 rows in set (0.00 sec)

mysql>
```

```
Aug 6 17:01
sanket-kotkar@sanket-kotkar-VirtualBox: ~

mysql> select * from orders;
+-----+-----+-----+-----+-----+
| ord_no | purch_amt | ord_date   | customer_id | salesman_id |
+-----+-----+-----+-----+-----+
| 70001  | 150.50    | 2012-05-05 | 3005        | 5002        |
| 70002  | 65.26     | 2012-10-05 | 3002        | 5001        |
| 70003  | 2480.40   | 2012-10-10 | 3009        | 5003        |
| 70004  | 110.50    | 2012-08-17 | 3009        | 5003        |
| 70005  | 2400.60   | 2012-07-27 | 3007        | 5001        |
| 70007  | 948.50    | 2012-09-10 | 3005        | 5002        |
| 70008  | 5760.00   | 2012-09-10 | 3002        | 5001        |
| 70009  | 270.65    | 2012-09-10 | 3001        | 5005        |
| 70010  | 1983.43   | 2012-10-10 | 3004        | 5006        |
| 70011  | 75.29     | 2012-08-17 | 3003        | 5007        |
| 70012  | 250.45    | 2012-06-27 | 3008        | 5002        |
| 70013  | 3045.60   | 2012-04-25 | 3002        | 5001        |
+-----+-----+-----+-----+-----+
12 rows in set (0.00 sec)

mysql> select * from customer;
+-----+-----+-----+-----+-----+
| customer_id | cust_name      | city        | grade | salesman_id |
+-----+-----+-----+-----+-----+
| 3001        | Brad Guzan     | London     | 0     | 5005        |
| 3002        | Nick Rimando   | New York   | 100    | 5001        |
| 3003        | Jozy Altidore  | Moscow     | 200    | 5007        |
| 3004        | Fabian Johnson | Paris      | 300    | 5006        |
| 3005        | Graham Zusi    | California | 200    | 5002        |
| 3007        | Brad Davis     | New York   | 200    | 5001        |
| 3008        | Julian Green   | London     | 300    | 5002        |
| 3009        | Geoff Cameron  | Berlin     | 100    | 5003        |
+-----+-----+-----+-----+-----+
8 rows in set (0.00 sec)
```

```
Aug 6 17:01
sanket-kotkar@sanket-kotkar-VirtualBox: ~

8 rows in set (0.00 sec)

mysql> select * from salesman;
+-----+
| salesman_id | name      | city      | commission |
+-----+
| 5001 | James Hoog | New York | 0.15 |
| 5002 | Nail Knite | Paris    | 0.13 |
| 5003 | Paul Adam  | Rome     | 0.13 |
| 5005 | Pit Alex   | London   | 0.11 |
| 5006 | Mc Lyon    | Paris    | 0.14 |
| 5007 | Lauson Hen | San Jose | 0.12 |
+-----+

6 rows in set (0.00 sec)

mysql> SELECT s.name AS Salesman, c.cust_name, c.city
-> FROM customer c
-> JOIN salesman s ON c.salesman_id = s.salesman_id
-> WHERE c.city = s.city;
+-----+
| Salesman | cust_name | city      |
+-----+
| James Hoog | Nick Rimando | New York |
| James Hoog | Brad Davis  | New York |
| Pit Alex   | Brad Guzan  | London   |
| Mc Lyon    | Fabian Johnson | Paris    |
+-----+

4 rows in set (0.01 sec)

mysql> SELECT o.ord_no, o.purch_amt, c.cust_name, c.city
-> FROM orders o
-> JOIN customer c ON o.customer_id = c.customer_id
-> WHERE o.purch_amt BETWEEN 500 AND 2000;
```

```
Aug 6 17:01
sanket-kotkar@sanket-kotkar-VirtualBox: ~

-> FROM customer c
-> JOIN salesman s ON c.salesman_id = s.salesman_id
-> WHERE c.city = s.city;
+-----+
| Salesman | cust_name | city      |
+-----+
| James Hoog | Nick Rimando | New York |
| James Hoog | Brad Davis  | New York |
| Pit Alex   | Brad Guzan  | London   |
| Mc Lyon    | Fabian Johnson | Paris    |
+-----+

4 rows in set (0.01 sec)

mysql> SELECT o.ord_no, o.purch_amt, c.cust_name, c.city
-> FROM orders o
-> JOIN customer c ON o.customer_id = c.customer_id
-> WHERE o.purch_amt BETWEEN 500 AND 2000;
+-----+
| ord_no | purch_amt | cust_name | city      |
+-----+
| 70007 | 948.50 | Graham Zusi | California |
| 70010 | 1983.43 | Fabian Johnson | Paris    |
+-----+

2 rows in set (0.00 sec)

mysql> SELECT c.cust_name AS "Customer Name", c.city, s.name AS Salesman, s.commission
-> FROM customer c
-> JOIN salesman s ON c.salesman_id = s.salesman_id;
+-----+
| Customer Name | city      | Salesman | commission |
+-----+
| Nick Rimando | New York | James Hoog | 0.15 |
| Brad Davis  | New York | James Hoog | 0.15 |
+-----+
```



```
Aug 6 17:02
sanket-kotkar@sanket-kotkar-VirtualBox: ~

+-----+
| Customer Name | city | Salesman | commission |
+-----+
| Nick Rimando | New York | James Hoog | 0.15 |
| Brad Davis | New York | James Hoog | 0.15 |
| Graham Zusi | California | Nail Knite | 0.13 |
| Julian Green | London | Nail Knite | 0.13 |
| Geoff Cameron | Berlin | Paul Adam | 0.13 |
| Brad Guzan | London | Pit Alex | 0.11 |
| Fabian Johnson | Paris | Mc Lyon | 0.14 |
| Jozy Altidore | Moscow | Lauson Hen | 0.12 |
+-----+
8 rows in set (0.00 sec)

mysql> SELECT c.cust_name AS "Customer Name", c.city, s.name AS Salesman, s.commission
-> FROM customer c
-> JOIN salesman s ON c.salesman_id = s.salesman_id
-> WHERE s.commission > 0.12;

+-----+
| Customer Name | city | Salesman | commission |
+-----+
| Nick Rimando | New York | James Hoog | 0.15 |
| Brad Davis | New York | James Hoog | 0.15 |
| Graham Zusi | California | Nail Knite | 0.13 |
| Julian Green | London | Nail Knite | 0.13 |
| Geoff Cameron | Berlin | Paul Adam | 0.13 |
| Fabian Johnson | Paris | Mc Lyon | 0.14 |
+-----+
6 rows in set (0.00 sec)

mysql> SELECT *
-> FROM orders o
-> JOIN customer c ON o.customer_id = c.customer_id
```

```
Aug 6 17:02
sanket-kotkar@sanket-kotkar-VirtualBox: ~

-> JOIN customer c ON o.customer_id = c.customer_id
-> JOIN salesman s ON o.salesman_id = s.salesman_id;

+-----+
| ord_no | purch_amt | ord_date | customer_id | salesman_id | customer_id | cust_name | city | grade | sale
sman_id | salesman_id | name | city | commission |
+-----+
| 70002 | 65.26 | 2012-10-05 | 3002 | 5001 | 3002 | Nick Rimando | New York | 100 |
5001 | 5001 | James Hoog | New York | 0.15 |
| 70005 | 2400.60 | 2012-07-27 | 3007 | 5001 | 3007 | Brad Davis | New York | 200 |
5001 | 5001 | James Hoog | New York | 0.15 |
| 70008 | 5760.00 | 2012-09-10 | 3002 | 5001 | 3002 | Nick Rimando | New York | 100 |
5001 | 5001 | James Hoog | New York | 0.15 |
| 70013 | 3045.60 | 2012-04-25 | 3002 | 5001 | 3002 | Nick Rimando | New York | 100 |
5001 | 5001 | James Hoog | New York | 0.15 |
| 70001 | 150.50 | 2012-08-05 | 3005 | 5002 | 3005 | Graham Zusi | California | 200 |
5002 | 5002 | Nail Knite | Paris | 0.13 |
| 70007 | 948.50 | 2012-09-10 | 3005 | 5002 | 3005 | Graham Zusi | California | 200 |
5002 | 5002 | Nail Knite | Paris | 0.13 |
| 70012 | 250.45 | 2012-06-27 | 3008 | 5002 | 3008 | Julian Green | London | 300 |
5002 | 5002 | Nail Knite | Paris | 0.13 |
| 70003 | 2480.40 | 2012-10-10 | 3009 | 5003 | 3009 | Geoff Cameron | Berlin | 100 |
5003 | 5003 | Paul Adam | Rome | 0.13 |
| 70004 | 110.50 | 2012-08-17 | 3009 | 5003 | 3009 | Geoff Cameron | Berlin | 100 |
5003 | 5003 | Paul Adam | Rome | 0.13 |
| 70009 | 270.65 | 2012-09-10 | 3001 | 5005 | 3001 | Brad Guzan | London | 0 |
5005 | 5005 | Pit Alex | London | 0.11 |
| 70010 | 1983.43 | 2012-10-10 | 3004 | 5006 | 3004 | Fabian Johnson | Paris | 300 |
5006 | 5006 | Mc Lyon | Paris | 0.14 |
| 70011 | 75.29 | 2012-08-17 | 3003 | 5007 | 3003 | Jozy Altidore | Moscow | 200 |
5007 | 5007 | Lauson Hen | San Jose | 0.12 |
+-----+
```

```
mysql> SELECT c.cust_name, c.city AS customer_city, c.grade,  
->          s.name AS salesman, s.city AS salesman_city  
-> FROM customer c  
-> JOIN salesman s ON c.salesman_id = s.salesman_id  
-> ORDER BY c.customer_id ASC;
```

cust_name	customer_city	grade	salesman	salesman_city
Brad Guzan	London	0	Pit Alex	London
Nick Rimando	New York	100	James Hoog	New York
Jozy Altidore	Moscow	200	Lauson Hen	San Jose
Fabian Johnson	Paris	300	Mc Lyon	Paris
Graham Zusi	California	200	Nail Knite	Paris
Brad Davis	New York	200	James Hoog	New York
Julian Green	London	300	Nail Knite	Paris
Geoff Cameron	Berlin	100	Paul Adam	Rome

8 rows in set (0.00 sec)

```
mysql> SELECT s.salesman_id, s.name  
-> FROM salesman s  
-> LEFT JOIN customer c ON s.salesman_id = c.salesman_id  
-> GROUP BY s.salesman_id, s.name  
-> ORDER BY s.salesman_id ASC;
```

salesman_id	name
5001	James Hoog
5002	Nail Knite
5003	Paul Adam
5005	Pit Alex
5006	Mc Lyon