

Que 1. Creating Table

```
CREATE TABLE Admission (Roll INT, Name VARCHAR(50), City VARCHAR(50), Email VARCHAR(50),
Mobile VARCHAR(50), College VARCHAR(50), Branch VARCHAR(50), Semester INT, Address
varchar(50), Total INT, Percentage INT CHECK (Percentage >= 60), Grade CHAR )
SELECT * FROM Admission;
```

Output -

Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade
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Que 2. Inserting Data to Table -

```
INSERT INTO admission VALUES (101, 'Aysuh', 'Nagpur', 'aysuh@gmail.com', 1234567890, 'Carmel
Academy', 'CSE', 8, 'Bus Stop', 87, 77, 'B')
SELECT * FROM Admission;
```

Output -

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade
1	101	Aysuh	Nagpur	aysuh@gmail.com	1234567890	Carmel Academy	CSE	8	Bus Stop	87	77	B

Que 3. Inserting Data using Inserting Line -

```
INSERT INTO Admission VALUES
(102, 'Atharva', 'Pune', 'athu@gmail.com', 2345678901, 'GNIT', 'CSE', 7, 'Katol naka', 255,
78, 'A'),
(103, 'Vrushal', 'Mumbai', 'vrushal@gmail.com', 3456789012, 'SBJITME', 'BCA', 5, 'Baba
Traders', 260, 65, 'C'),
(104, 'Prany', 'Nagpur', 'pranay@gmail.com', 4567890123, 'NIT', 'ETC', 6, 'Ghue Shop', 300,
68, 'C'),
(105, 'Sanket', 'Pune', 'sanket@gmail.com', 5678901234, 'GNIT', 'CSE', 8, 'Bajaj Nagar', 310, 85, 'B'),
(106, 'Tejas', 'Mumbai', 'tejas@gmail.com', 6789012345, 'SBJITMR', 'BCA', 7, 'Kamal Nath
Ground', 332, 89, 'A'),
(107, 'Manoj', 'Nagpur', 'manoj@gmail.com', 7890123456, 'NIT', 'ETC', 8, 'Fetri', 289, 91,
'A'),
(108, 'Yash', 'Pune', 'yash@gmail.com', 8901234567, 'GNIT', 'CSE', 7, 'Yerla', 299, 89, 'B'),
(109, 'Durvesh', 'Mumbai', 'durvesh@gmail.com', 9012345678, 'SBJITMR', 'BCA', 5, 'Manish Nagar', 332,
71, 'A'),
(110, 'Tanvish', 'Nagpur', 'tancish@gmail.com', 0123456789, 'NIT', 'ETC', 7, 'kalmeshwar naka', 350, 89,
'B')
SELECT * FROM A dmission
```

Output

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade
1	101	Aysuh	Nagpur	aysuh@gmail.com	1234567890	Carmel Academy	CSE	8	Bus Stop	87	77	B
2	102	Atharva	Pune	athu@gmail.com	2345678901	GNIT	CSE	7	Katol naka	255	78	A
3	103	Vrushal	Mumbai	vrushal@gmail.com	3456789012	SBJITME	BCA	5	Baba Traders	260	65	C
4	104	Prany	Nagpur	pranay@gmail.com	4567890123	NIT	ETC	6	Ghue Shop	300	68	C
5	105	Sanket	Pune	sanket@gmail.com	5678901234	GNIT	CSE	8	Bajaj Nagar	310	85	B
6	106	Tejas	Mumbai	tejas@gmail.com	6789012345	SBJITMR	BCA	7	Kamal Nath Ground	332	89	A
7	107	Manoj	Nagpur	manoj@gmail.com	7890123456	NIT	ETC	8	Fetri	289	91	A
8	108	Yash	Pune	yash@gmail.com	8901234567	GNIT	CSE	7	Yerla	299	89	B
9	109	Durvesh	Mumbai	durvesh@gmail.com	9012345678	SBJITMR	BCA	5	Manish Nagar	332	71	A
10	110	Tanvish	Nagpur	tancish@gmail.com	123456789	NIT	ETC	7	kalmeshwar naka	350	87	B

Que 4. Fetching Roll, Name and Branch form admission table

```
SELECT Roll, Name, branch FROM admission
```

Output -

	Roll	Name	branch
1	101	Aysuh	CSE
2	102	Atharva	CSE
3	103	Vrushal	BCA
4	104	Prany	ETC
5	105	Sanket	CSE
6	106	Tejas	BCA
7	107	Manoj	ETC
8	108	Yash	CSE
9	109	Durvesh	BCA
10	110	Tanvish	ETC

Que 5. Fetching record where city is Nagpur

```
SELECT * FROM Admission WHERE city = 'Nagpur'
```

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade
1	101	Aysuh	Nagpur	aysuh@gmail.com	1234567890	Carmel Academy	CSE	8	Bus Stop	87	77	B
2	104	Prany	Nagpur	pranay@gmail.com	4567890123	NIT	ETC	6	Ghue Shop	300	68	C
3	107	Manoj	Nagpur	manoj@gmail.com	7890123456	NIT	ETC	8	Fetri	289	91	A
4	110	Tanvish	Nagpur	tancish@gmail.com	123456789	NIT	ETC	7	kalmeshwar naka	350	87	B

Que 6. Fetching record where city is Pune and total is greater than 300

SELECT * FROM Admission WHERE city = 'Mumbai' AND total >= 300

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade
1	106	Tejas	Mumbai	tejas@gmail.com	6789012345	SBJITMR	BCA	7	Kamal Nath Ground	332	89	A
2	109	Durvesh	Mumbai	durvesh@gmail.com	9012345678	SBJITMR	BCA	5	Manish Nagar	332	71	A

Que 7. Fetching record whose marks is between 300 to 350

SELECT * FROM Admission WHERE total BETWEEN 300 and 350

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade
1	104	Prany	Nagpur	pranay@gmail.com	4567890123	NIT	ETC	6	Ghue Shop	300	68	C
2	105	Sanket	Pune	sanket@gmail.com	5678901234	GNIT	CSE	8	Bajaj Nagar	310	85	B
3	106	Tejas	Mumbai	tejas@gmail.com	6789012345	SBJITMR	BCA	7	Kamal Nath Ground	332	89	A
4	109	Durvesh	Mumbai	durvesh@gmail.com	9012345678	SBJITMR	BCA	5	Manish Nagar	332	71	A
5	110	Tanvish	Nagpur	tancish@gmail.com	123456789	NIT	ETC	7	kalmeshwar naka	350	87	B

Que 8.Using Group by city

SELECT City FROM Admission GROUP BY City

	City
1	Mumbai
2	Nagpur
3	Pune

Que 9. Order name in ascending order

SELECT * FROM Admission ORDER BY Name

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade
1	102	Atharva	Pune	athu@gmail.com	2345678901	GNIT	CSE	7	Katol naka	255	78	A
2	101	Aysuh	Nagpur	aysuh@gmail.com	1234567890	Carmel Academy	CSE	8	Bus Stop	87	77	B
3	109	Durvesh	Mumbai	durvesh@gmail.com	9012345678	SBJITMR	BCA	5	Manish Nagar	332	71	A
4	107	Manoj	Nagpur	manoj@gmail.com	7890123456	NIT	ETC	8	Fetri	289	91	A
5	104	Prany	Nagpur	pranay@gmail.com	4567890123	NIT	ETC	6	Ghue Shop	300	68	C
6	105	Sanket	Pune	sanket@gmail.com	5678901234	GNIT	CSE	8	Bajaj Nagar	310	85	B
7	110	Tanvish	Nagpur	tancish@gmail.com	123456789	NIT	ETC	7	kalmeshwar naka	350	87	B
8	106	Tejas	Mumbai	tejas@gmail.com	6789012345	SBJITMR	BCA	7	Kamal Nath Ground	332	89	A
9	103	Vrushal	Mumbai	vrushal@gmail.com	3456789012	SBJITME	BCA	5	Baba Traders	260	65	C
10	108	Yash	Pune	yash@gmail.com	8901234567	GNIT	CSE	7	Yerla	299	89	B

Que 10. Order by roll number in descending order

SELECT * FROM Admission ORDER BY Roll DESC

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade
1	110	Tanvish	Nagpur	tancish@gmail.com	123456789	NIT	ETC	7	kalmeshwar naka	350	87	B
2	109	Durvesh	Mumbai	durvesh@gmail.com	9012345678	SBJITMR	BCA	5	Manish Nagar	332	71	A
3	108	Yash	Pune	yash@gmail.com	8901234567	GNIT	CSE	7	Yerla	299	89	B
4	107	Manoj	Nagpur	manoj@gmail.com	7890123456	NIT	ETC	8	Fetri	289	91	A
5	106	Tejas	Mumbai	tejas@gmail.com	6789012345	SBJITMR	BCA	7	Kamal Nath Ground	332	89	A
6	105	Sanket	Pune	sanket@gmail.com	5678901234	GNIT	CSE	8	Bajaj Nagar	310	85	B
7	104	Prany	Nagpur	pranay@gmail.com	4567890123	NIT	ETC	6	Ghue Shop	300	68	C
8	103	Vrushal	Mumbai	vrushal@gmail.com	3456789012	SBJITME	BCA	5	Baba Traders	260	65	C
9	102	Atharva	Pune	athu@gmail.com	2345678901	GNIT	CSE	7	Katol naka	255	78	A
10	101	Aysuh	Nagpur	aysuh@gmail.com	1234567890	Carmel Academy	CSE	8	Bus Stop	87	77	B

Que 10. Fetching record whose city is Nagpur and Pune.

SELECT * FROM Admission WHERE City IN('Nagpur', 'Pune');

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade
1	101	Aysuh	Nagpur	aysuh@gmail.com	1234567890	Carmel Academy	CSE	8	Bus Stop	87	77	B
2	102	Atharva	Pune	athu@gmail.com	2345678901	GNIT	CSE	7	Katol naka	255	78	A
3	104	Prany	Nagpur	pranay@gmail.com	4567890123	NIT	ETC	6	Ghue Shop	300	68	C
4	105	Sanket	Pune	sanket@gmail.com	5678901234	GNIT	CSE	8	Bajaj Nagar	310	85	B
5	107	Manoj	Nagpur	manoj@gmail.com	7890123456	NIT	ETC	8	Fetri	289	91	A
6	108	Yash	Pune	yash@gmail.com	8901234567	GNIT	CSE	7	Yerla	299	89	B
7	110	Tanvish	Nagpur	tancish@gmail.com	123456789	NIT	ETC	7	kalmeshwar naka	350	87	B

Que 11. Fetching record whose branch is not CSE and college is not GNIT but percentages is greater than 80

```
SELECT * FROM Admission WHERE Branch != 'CSE' AND College != 'GNIT' AND Percentage >= 80
```

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade
1	106	Tejas	Mumbai	tejas@gmail.com	6789012345	SBJITMR	BCA	7	Kamal Nath Ground	332	89	A
2	107	Manoj	Nagpur	manoj@gmail.com	7890123456	NIT	ETC	8	Fetri	289	91	A
3	110	Tanvish	Nagpur	tancish@gmail.com	123456789	NIT	ETC	7	kalmeshwar naka	350	87	B

Que 12. Delete record whose roll number is 105

```
DELETE FROM Admission WHERE roll = 105
```

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade
1	101	Aysuh	Nagpur	aysuh@gmail.com	1234567890	Carmel Academy	CSE	8	Bus Stop	87	77	B
2	102	Atharva	Pune	athu@gmail.com	2345678901	GNIT	CSE	7	Katol naka	255	78	A
3	103	Vrushal	Mumbai	vrushal@gmail.com	3456789012	SBJITME	BCA	5	Baba Traders	260	65	C
4	104	Prany	Nagpur	pranay@gmail.com	4567890123	NIT	ETC	6	Ghue Shop	300	68	C
5	106	Tejas	Mumbai	tejas@gmail.com	6789012345	SBJITMR	BCA	7	Kamal Nath Ground	332	89	A
6	107	Manoj	Nagpur	manoj@gmail.com	7890123456	NIT	ETC	8	Fetri	289	91	A
7	108	Yash	Pune	yash@gmail.com	8901234567	GNIT	CSE	7	Yerla	299	89	B
8	109	Durvesh	Mumbai	durvesh@gmail.com	9012345678	SBJITMR	BCA	5	Manish Nagar	332	71	A
9	110	Tanvish	Nagpur	tancish@gmail.com	123456789	NIT	ETC	7	kalmeshwar naka	350	87	B

Que 13. Addition of total using SUM() function

```
SELECT SUM(total) AS total_marks FROM Admission
```

	total_marks
1	2504

Que 14. Find average percentages using AVG() function

```
SELECT AVG(Percentage) AS avg_per FROM Admission
```

	avg_per
1	79

Que 15. Total number of record in admission table

```
SELECT count(Roll) AS No_Of_Record FROM Admission
```

	No_Of_Record
1	9

Que 16. Find minimum percentage using MIN() function

```
SELECT MIN(Percentage) AS Min_Percentage FROM Admission;
```

	Min_Percentage
1	65

Que 17. Find Maximum percentages using MAX() function

```
SELECT MAX(Percentage) AS Max_Percentage FROM Admission;
```

	Max_Percentage
1	91

Que 18. Find top 3 record whose percentage is greater than 85

```
SELECT TOP 3 * FROM Admission WHERE Percentage > 85
```

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade
1	106	Tejas	Mumbai	tejas@gmail.com	6789012345	SBJITMR	BCA	7	Kamal Nath Ground	332	89	A
2	107	Manoj	Nagpur	manoj@gmail.com	7890123456	NIT	ETC	8	Fetri	289	91	A
3	108	Yash	Pune	yash@gmail.com	8901234567	GNIT	CSE	7	Yerla	299	89	B

Que 19. Update name as suresh where roll no is 108

UPDATE Admission SET Name = 'Suresh' WHERE Roll = 108

SELECT * FROM Admission

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade
1	101	Aysuh	Nagpur	aysuh@gmail.com	1234567890	Carmel Academy	CSE	8	Bus Stop	87	77	B
2	102	Atharva	Pune	athu@gmail.com	2345678901	GNIT	CSE	7	Katol naka	255	78	A
3	103	Vrushal	Mumbai	vrushal@gmail.com	3456789012	SBJITME	BCA	5	Baba Traders	260	65	C
4	104	Prany	Nagpur	pranay@gmail.com	4567890123	NIT	ETC	6	Ghue Shop	300	68	C
5	106	Tejas	Mumbai	tejas@gmail.com	6789012345	SBJITMR	BCA	7	Kamal Nath Ground	332	89	A
6	107	Manoj	Nagpur	manoj@gmail.com	7890123456	NIT	ETC	8	Fetri	289	91	A
7	108	Suresh	Pune	yash@gmail.com	8901234567	GNIT	CSE	7	Yerla	299	89	B
8	109	Durvesh	Mumbai	durvesh@gmail.com	9012345678	SBJITMR	BCA	5	Manish Nagar	332	71	A
9	110	Tanvish	Nagpur	tancish@gmail.com	123456789	NIT	ETC	7	kalmeshwar naka	350	87	B

Que 20. Structure of admission table

sp_help admission

	Name	Owner	Type	Created_datetime
1	Admission	dbo	user table	2023-12-17 12:53:41.650

	Column_name	Type	Computed	Length	Prec	Scale	Nullable	TrimTrailingBlanks	FixedLenNullInSource	Collation
1	Roll	int	no	4	10	0	yes	(n/a)	(n/a)	NULL
2	Name	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
3	City	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
4	Email	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
5	Mobile	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
6	College	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
7	Branch	varchar	no	50			yes	no	yes	SQL_Latin1_General_CP1_CI_AS
8	Semester	int	no	4	10	0	yes	(n/a)	(n/a)	NULL

	Identity	Seed	Increment	Not For Replication
1	No identity column defined.	NULL	NULL	NULL

	RowGuidCol
1	No rowguidcol column defined.

Que 21. Add new column to table name as subject

ALTER TABLE Admission ADD Subject VARCHAR(50);

SELECT * FROM Admission;

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade	Subject
1	101	Aysuh	Nagpur	aysuh@gmail.com	1234567890	Carmel Academy	CSE	8	Bus Stop	87	77	B	NULL
2	102	Atharva	Pune	athu@gmail.com	2345678901	GNIT	CSE	7	Katol naka	255	78	A	NULL
3	103	Vrushal	Mumbai	vrushal@gmail.com	3456789012	SBJITME	BCA	5	Baba Traders	260	65	C	NULL
4	104	Prany	Nagpur	pranay@gmail.com	4567890123	NIT	ETC	6	Ghue Shop	300	68	C	NULL
5	106	Tejas	Mumbai	tejas@gmail.com	6789012345	SBJITMR	BCA	7	Kamal Nath Ground	332	89	A	NULL
6	107	Manoj	Nagpur	manoj@gmail.com	7890123456	NIT	ETC	8	Fetri	289	91	A	NULL
7	108	Suresh	Pune	yash@gmail.com	8901234567	GNIT	CSE	7	Yerla	299	89	B	NULL
8	109	Durvesh	Mumbai	durvesh@gmail.com	9012345678	SBJITMR	BCA	5	Manish Nagar	332	71	A	NULL
9	110	Tanvish	Nagpur	tancish@gmail.com	123456789	NIT	ETC	7	kalmeshwar naka	350	87	B	NULL

Que 22. Delete subject column form table

ALTER TABLE admission DROP COLUMN subject;

SELECT * FROM Admission;

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	Grade
1	101	Aysuh	Nagpur	aysuh@gmail.com	1234567890	Carmel Academy	CSE	8	Bus Stop	87	77	B
2	102	Atharva	Pune	athu@gmail.com	2345678901	GNIT	CSE	7	Katol naka	255	78	A
3	103	Vrushal	Mumbai	vrushal@gmail.com	3456789012	SBJITME	BCA	5	Baba Traders	260	65	C
4	104	Prany	Nagpur	pranay@gmail.com	4567890123	NIT	ETC	6	Ghue Shop	300	68	C
5	106	Tejas	Mumbai	tejas@gmail.com	6789012345	SBJITMR	BCA	7	Kamal Nath Ground	332	89	A
6	107	Manoj	Nagpur	manoj@gmail.com	7890123456	NIT	ETC	8	Fetri	289	91	A
7	108	Suresh	Pune	yash@gmail.com	8901234567	GNIT	CSE	7	Yerla	299	89	B
8	109	Durvesh	Mumbai	durvesh@gmail.com	9012345678	SBJITMR	BCA	5	Manish Nagar	332	71	A
9	110	Tanvish	Nagpur	tancish@gmail.com	123456789	NIT	ETC	7	kalmeshwar naka	350	87	B

Que 23. Rename column Name
EXEC sp_rename 'admission.S_Grade', 'S_Grade', 'Column';
SELECT * FROM Admission;

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	admission.S_Grade
1	101	Aysuh	Nagpur	aysuh@gmail.com	1234567890	Carmel Academy	CSE	8	Bus Stop	87	77	B
2	102	Atharva	Pune	athu@gmail.com	2345678901	GNIT	CSE	7	Katol naka	255	78	A
3	103	Vrushal	Mumbai	vrushal@gmail.com	3456789012	SBJITME	BCA	5	Baba Traders	260	65	C
4	104	Prany	Nagpur	pranay@gmail.com	4567890123	NIT	ETC	6	Ghue Shop	300	68	C
5	106	Tejas	Mumbai	tejas@gmail.com	6789012345	SBJITMR	BCA	7	Kamal Nath Ground	332	89	A
6	107	Manoj	Nagpur	manoj@gmail.com	7890123456	NIT	ETC	8	Fetri	289	91	A
7	108	Suresh	Pune	yash@gmail.com	8901234567	GNIT	CSE	7	Yerla	299	89	B
8	109	Durvesh	Mumbai	durvesh@gmail.com	9012345678	SBJITMR	BCA	5	Manish Nagar	332	71	A
9	110	Tarvish	Nagpur	tancish@gmail.com	123456789	NIT	ETC	7	kalmeshwar naka	350	87	B

Que 24. Creating new table from existing table
SELECT * INTO Demo_Admission FROM Admission;
SELECT * FROM Demo_Admission;

	Roll	Name	City	Email	Mobile	College	Branch	Semester	Address	Total	Percentage	admission.S_Grade
1	101	Aysuh	Nagpur	aysuh@gmail.com	1234567890	Carmel Academy	CSE	8	Bus Stop	87	77	B
2	102	Atharva	Pune	athu@gmail.com	2345678901	GNIT	CSE	7	Katol naka	255	78	A
3	103	Vrushal	Mumbai	vrushal@gmail.com	3456789012	SBJITME	BCA	5	Baba Traders	260	65	C
4	104	Prany	Nagpur	pranay@gmail.com	4567890123	NIT	ETC	6	Ghue Shop	300	68	C
5	106	Tejas	Mumbai	tejas@gmail.com	6789012345	SBJITMR	BCA	7	Kamal Nath Ground	332	89	A
6	107	Manoj	Nagpur	manoj@gmail.com	7890123456	NIT	ETC	8	Fetri	289	91	A
7	108	Suresh	Pune	yash@gmail.com	8901234567	GNIT	CSE	7	Yerla	299	89	B
8	109	Durvesh	Mumbai	durvesh@gmail.com	9012345678	SBJITMR	BCA	5	Manish Nagar	332	71	A
9	110	Tarvish	Nagpur	tancish@gmail.com	123456789	NIT	ETC	7	kalmeshwar naka	350	87	B