

1. Write a Query to display top 10 students names who got low CGPA from previous semester and present too?

Ans. select top 10 StudentName,PrevSemResult,CGPA
from student_details
where CGPA < 6 or PrevSemResult < 6
order by CGPA asc, PrevSemResult asc;

	StudentName	PrevSemResult	CGPA
1	Anika	5.03	4.54
2	Nikhil	5.01	4.56
3	Siddharth	5.06	4.57
4	Ananya	5.02	4.58
5	Sai	5.03	4.59
6	Isha	5.04	4.59
7	Diya	5.06	4.59
8	Sanvi	5.04	4.60
9	Diya	5.09	4.60
10	Diya	5.00	4.61

2. Write a Query to display five company names who hired low IQ students ?

Ans. select top 5 CompanyName,IQ,placement as placed
from student_details
where IQ < 60 and Placement = 'yes'
group by IQ, Placement,CompanyName
order by IQ asc;

	CompanyName	IQ	placed
1	KPMG	41	Yes
2	Infosys	44	Yes
3	Infosys	45	Yes
4	Accenture	51	Yes
5	Deloitte	52	Yes

3. Write a Query to display top 5 weak performers based on CGPA and Package ?

Ans. select top 5 StudentName, CGPA, Package
from student_details
where CGPA <= 5 AND Package <= 5
order by CGPA desc;

	StudentName	CGPA	Package
1	Siddharth	4.99	5
2	Aditya	4.97	5
3	Shruti	4.97	3
4	Kavya	4.96	5
5	Saanvi	4.87	4

4. Write a Query to display names who having high IQ with No experience ?

Ans. select top 5 StudentName, IQ, InternshipExperience
from student_details
where IQ >= 140 and InternshipExperience = 'no'
group by IQ, InternshipExperience, StudentName
order by IQ desc;

	StudentName	IQ	InternshipExperience
1	Nikhil	158	No
2	Yash	157	No
3	Sanvi	152	No
4	Vihaan	150	No
5	Tara	148	No

5. Write a query to display top student who got highest CGPA and placed ?

Ans. select top 1 StudentName, CGPA, placement
from student_details
where Placement = 'yes'
order by CGPA desc;

	StudentName	CGPA	placement
1	Mira	10.46	Yes

6. Write a query to display top 5 students who got placed and Package with 20% Hike?

Ans. select top 5 studentname , package , package*20.0/100.0 as Hike
from student_details
where Placement = 'yes';

	studentname	package	Hike
1	Aarav	3	0.600000
2	Anika	24	4.800000
3	Arjun	25	5.000000
4	Asha	14	2.800000
5	Ishaan	9	1.800000

Operators

★ Write a query to display name who got placed and CGPA greater than 10 ?

select top 5 StudentName, Placement
from student_details
where CGPA >10 AND Placement = 'no';

	StudentName	Placement
1	Vihaan	No
2	Tara	No
3	Dev	No
4	Rohan	No
5	Sai	No

★ Write a query to display student got placed in amazon or IQ is greater than 100 ?

select top 5 StudentName,CompanyName,IQ
from student_details
where CompanyName = 'amazon' OR IQ > 100;

	StudentName	CompanyName	IQ
1	Aarav	Siemens	107
2	Ananya	NULL	109
3	Anika	Amazon	122
4	Dev	NULL	123
5	Diya	NULL	111

- ★ Write a query to display name of students who doesn't having bond one year ?

```
select top 5 StudentName,Bond
from student_details
where NOT Bond = '1 year';
```

	StudentName	Bond
1	Anika	2 Years
2	Arjun	2 Years
3	Asha	3 Years
4	Ishaan	3 Years
5	Kabir	2 Years

- ★ Write a query to display name of students who working as amazon, Deloitte,tcs and Infosys ?

```
select top 8 StudentName,CompanyName
from student_details
where CompanyName IN ('amazon','deloitte','tcs','infosys');
```

	StudentName	CompanyName
1	Anika	Amazon
2	Asha	Deloitte
3	Rohan	Amazon
4	Diya	TCS
5	Varun	TCS
6	Aarav	Deloitte
7	Ananya	Infosys
8	Asha	Deloitte

- ★ Write a query to display ID of students who not working in KPMG and Oracle ?

```
select top 5 Collegeld,CompanyName
from student_details
where CompanyName NOT IN ('KPMG','Oracle');
```

	Collegeld	CompanyName
1	CLG0030	Siemens
2	CLG0055	Amazon
3	CLG0004	Tech Mahindra
4	CLG0015	Deloitte
5	CLG0057	Siemens

- ★ Write a Query to display name of students who are having IQ in the range of 40 to 50 ?

```
select top 5 StudentName,IQ
from student_details
where IQ between '40' and '50';
```

	StudentName	IQ
1	Sanvi	44
2	Varun	45
3	Kabir	42
4	Sam	41

- ★ Write a query to display ID of students who are not having academic performance is 2 to 8 ?

```
select top 5 CollegeID,AcademicPerformance
from student_details
where AcademicPerformance NOT BETWEEN '2' and '8';
```

	CollegeID	AcademicPerformance
1	CLG0036	9
2	CLG0097	9
3	CLG0050	10
4	CLG0077	9
5	CLG0097	9

- ★ Write a Query to display names of students having first letter A and last letter A ?

```
select top 5 StudentName
from student_details
where StudentName like 'a%a';
```

	StudentName
1	Aditya
2	Ananya
3	Anika
4	Asha
5	Aditya

★ All Operators

```
select top 5 StudentName, IQ, CGPA, Placement, CompanyName ,Bond, Package
from student_details
where CompanyName IN ('amazon','oracle') And
Bond NOT IN ('1 year') And
CGPA BETWEEN '6'AND '8' And
Package NOT BETWEEN '10' AND '15' And
CompanyName LIKE '__a_%' And
```

Results Messages

	StudentName	IQ	CGPA	Placement	CompanyName	Bond	Package
1	Aarav	107	6.28	Yes	Siemens	1 Year	3
2	Anika	122	5.75	Yes	Amazon	2 Years	24
3	Arjun	96	7.69	Yes	Tech Mahindra	2 Years	25
4	Asha	96	5.32	Yes	Deloitte	3 Years	14
5	Ishaan	108	8.60	Yes	Siemens	3 Years	9

MULTI ROW FUNCTIONS

★ Write a query to display names of student who got highest CGPA ?

```
select top 5 StudentName , max(CGPA) as CGPA
from student_details
group by StudentName;
```

	StudentName	CGPA
1	Asha	10.35
2	Saanvi	10.44
3	Aditya	10.35
4	Kavya	10.42
5	Rohan	10.27

★ Write a query to display names of students who got lowest CGPA on previous semester ?

```
select top 5 StudentName , min(PrevSemResult) as PreCGPA
from student_details
group by StudentName;
```

	StudentName	PreCGPA
1	Asha	5.02
2	Saanvi	5.01
3	Aditya	5.01
4	Kavya	5.00
5	Rohan	5.10

- ★ write a query to display total package of company that having starting letter I and ending letter S ?

```
select sum(package)as Total_package,CompanyName
from student_details
where CompanyName like 'i%s'
group by CompanyName;
```

Results Messages		
	Total_package	CompanyName
1	3852	Infosys

- ★ write a query to display average CGPA based on Academic performance ?

```
select avg(CGPA)as Avg_CGPA,AcademicPerformance
from student_details
where AcademicPerformance between '5' and '6'
group by AcademicPerformance;
```

	Avg_CGPA	AcademicPerformance
1	7.516000	6
2	7.587741	5

- ★ write a query to display total students who having IQ knowledge is 100 ?

```
select count(collegeID) as Total_Students , IQ
from student_details
where IQ =100
group by IQ;
```

Results Messages		
	Total_Students	IQ
1	263	100

SUB QUERIES

★ write a query to display names of students who got package higher than average package?

```
select top 5 studentname , package
from student_details
where package > ( select avg(package)
                  from student_details);
```

	studentname	package
1	Anika	24
2	Arjun	25
3	Asha	14
4	Kabir	15
5	Rohan	14

★ write a query to display who got higher CGPA than placed students who got low CGPA ?

```
select top 5 studentname, CGPA, Placement
from student_details
where CGPA > ( select min(CGPA)
               from student_details
               where Placement = 'yes');
```

	studentname	CGPA	Placement
1	Aarav	6.28	Yes
2	Aditya	5.37	No
3	Ananya	5.83	No
4	Anika	5.75	Yes
5	Arjun	7.69	Yes

★ write a query to display names of students who got highest CGPA than CGPA of student who having highest package ?


```

select top 5 studentname,CGPA,package
from student_details
where CGPA> ( select min(CGPA)
              from student_details
              where package = ( select max(package)
                                from student_details));

```

	studentname	CGPA	package
1	Aarav	6.28	3
2	Aditya	5.37	NULL
3	Ananya	5.83	NULL
4	Anika	5.75	24
5	Arjun	7.69	25

SINGLE ROW FUNCTIONS

Upper and Lower :

```

select top 5 StudentName,
Upper(StudentName) as UpperName,
Lower(StudentName)as LowerName
from student_details;

```

	StudentName	UpperName	LowerName
1	Aarav	AARAV	aarav
2	Aditya	ADITYA	aditya
3	Ananya	ANANYA	ananya
4	Anika	ANIKA	anika
5	Arjun	ARJUN	arjun

SubStr/SubString:

```

select top 5 StudentName
from student_details
where SUBSTRING(StudentName, 1, 3) != 'aar';

```

	StudentName
1	Aditya
2	Ananya
3	Anika
4	Arjun
5	Asha

ConCat :

select top 5 StudentName, CGPA, Placement,
concat(StudentName, ' scored ', CGPA, ' and Placement is ', Placement) AS Summary
from student_details;

	StudentName	CGPA	Placement	Summary
1	Aarav	6.28	Yes	Aarav scored 6.28 and Placement is Yes
2	Aditya	5.37	No	Aditya scored 5.37 and Placement is No
3	Ananya	5.83	No	Ananya scored 5.83 and Placement is No
4	Anika	5.75	Yes	Anika scored 5.75 and Placement is Yes
5	Arjun	7.69	Yes	Arjun scored 7.69 and Placement is Yes

Length:

select top 5 StudentName, DATALENGTH(StudentName) as Length
from student_details;

	StudentName	Length
1	Aarav	5
2	Aditya	6
3	Ananya	6
4	Anika	5
5	Arjun	5

Round:

select StudentName, CGPA, ROUND(CGPA, 1) as Rounded_CGPA
from student_details;

	StudentName	CGPA	Rounded_CGPA
1	Aarav	6.28	6.30
2	Aditya	5.37	5.40
3	Ananya	5.83	5.80
4	Anika	5.75	5.80
5	Arjun	7.69	7.70
6	Asha	5.32	5.30
7	Dev	6.58	6.60
8	Diya	8.76	8.80
9	Isha	6.33	6.30
10	Ishaan	8.60	8.60
11	Kabir	8.90	8.90
12	Kavya	6.51	6.50
13	Krish	9.01	9.00
14	Meera	8.40	8.40