

COLLEGE DATABASE

STUDENT Table:

Field	Type	Null	Key	Default	Extra
USN	varchar(10)	NO	PRI	NULL	
SNAME	varchar(25)	YES		NULL	
ADDRESS	varchar(25)	YES		NULL	
PHONE	int	YES		NULL	
GENDER	char(1)	YES		NULL	

STUDENT Table VALUES:

USN	SNAME	ADDRESS	PHONE	GENDER
1RN13CS020	AKSHAY	BELAGAVI	1232654578	M
1RN13CS062	SANDHYA	BENGALURU	1232654578	F
1RN13CS066	SUPRIYA	MANGALURU	1232654578	F
1RN13CS091	TEESHA	BENGALURU	1232654578	F
1RN14CS010	ABHAY	BENGALURU	1232654578	M
1RN14CS025	ASMI	BENGALURU	1232654578	F
1RN14CS032	BHASKAR	BENGALURU	1232654578	M
1RN15CS011	AJAY	TUMKUR	1232654578	M
1RN15CS029	CHITRA	DAVANGERE	1232654578	F
1RN15CS045	JEEVA	BELLARY	1232654578	M
1RN15CS091	SANTOSH	MANGALURU	1232654578	M
1RN16CS045	ISMAIL	KALBURGI	1232654578	M
1RN16CS088	SAMEERA	SHIMOGA	1232654578	F
1RN16CS122	VINAYAKA	CHIKAMAG...	1232654578	M
NULL	NULL	NULL	NULL	NULL

SEMSEC Table:

Field	Type	Null	Key	Default	Extra
SSID	varchar(5)	NO	PRI	NULL	
SEM	int	YES		NULL	
SEC	char(1)	YES		NULL	

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SEMSEC Table VALUES:

SSID	SEM	SEC
CSE1A	1	A
CSE1B	1	B
CSE1C	1	C
CSE2A	2	A
CSE2B	2	B
CSE2C	2	C
CSE3A	3	A
CSE3B	3	B
CSE3C	3	C
CSE4A	4	A
CSE4B	4	B
CSE4C	4	C
CSE5A	5	A
CSE5B	5	B
CSE5C	5	C
CSE6A	6	A

CLASS Table:

Field	Type	Null	Key	Default	Extra
USN	varchar(10)	NO	PRI	NULL	
SSID	varchar(5)	NO	PRI	NULL	

CLASS Table VALUES:

USN	SSID
1RN15CS011	CSE4A
1RN15CS029	CSE4A
1RN14CS010	CSE7A
1RN14CS025	CSE7A
1RN14CS032	CSE7A
1RN13CS020	CSE8A
1RN13CS062	CSE8A
1RN13CS066	CSE8B
1RN13CS091	CSE8C
NULL	NULL

SUBJECT Table:

Field	Type	Null	Key	Default	Extra
SUBCODE	varchar(8)	NO	PRI	NULL	
TITLE	varchar(20)	YES		NULL	
SEM	int	YES		NULL	
CREDITS	int	YES		NULL	

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SUBJECT Table VALUES:

SUBCODE	TITLE	SEM	CREDITS
10CS71	OOAD	7	4
10CS72	ECS	7	4
10CS73	PTW	7	4
10CS74	DWDM	7	4
10CS81	ACA	8	4
10CS82	SSM	8	4
10CS83	NM	8	4
10CS84	CC	8	4
10CS85	PW	8	4
NULL	NULL	NULL	NULL

IAMARKS Table:

Field	Type	Null	Key	Default	Extra
USN	varchar(10)	NO	PRI	NULL	
SUBCODE	varchar(8)	NO	PRI	NULL	
SSID	varchar(5)	NO	PRI	NULL	
TEST1	int	YES		NULL	
TEST2	int	YES		NULL	
TEST3	int	YES		NULL	
FINALIA	int	YES		NULL	

QUERIES:

01. List all the student details studying in fourth semester 'c' section.

**SELECT * FROM STUDENT S JOIN CLASS C ON
S.USN=C.USN AND SSID='CSE4A';**

USN	SNAME	ADDRESS	PHONE	GENDER	USN	SSID
1RN15CS011	AJAY	TUMKUR	1232654578	M	1RN15CS011	CSE4A
1RN15CS029	CHITRA	DAVANGERE	1232654578	F	1RN15CS029	CSE4A

02. Compute the total number of male and female students in each semester and in each section.

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**SELECT SEM, SEC, GENDER, COUNT (GENDER)
FROM STUDENT S JOIN CLASS C ON S.USN=C.USN
JOIN SEMSEC SE ON C.SSID=SE.SSID GROUP BY
GENDER, SEM, SEC ORDER BY SEM;**

SEM	SEC	GENDER	COUNT(GENDER)
4	A	M	1
4	A	F	1
7	A	M	2
7	A	F	1
8	A	M	1
8	A	F	1
8	B	F	1
8	C	F	1

03. Create a view of Test1 marks of student USN '1BI15CS101' in all subjects.

**CREATE VIEW T1 AS SELECT SUBCODE,TEST1
FROM IAMARKS WHERE
USN='1RN13CS091';
SELECT * FROM T1;**

SUBCODE	TEST1
10CS81	15
10CS82	12
10CS83	19
10CS84	20
10CS85	15

04. Categorize students based on the following criterion:

If FinalIA = 17 to 20 then CAT = 'Outstanding'

If FinalIA = 12 to 16 then CAT = 'Average'

If FinalIA < 12 then CAT = 'Weak'

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```
SELECT S.USN, S.SNAME, S.ADDRESS, S.PHONE,  
S.GENDER,  
(CASE  
WHEN IA.TEST1 BETWEEN 17 AND 20 THEN  
'OUTSTANDING'  
WHEN IA.TEST1 BETWEEN 12 AND 16 THEN  
'AVERAGE'  
ELSE 'WEAK'  
END) AS CAT  
FROM STUDENT S, SEMSEC SS, IAMARKS IA,  
SUBJECT SUB  
WHERE S.USN = IA.USN AND  
SS.SSID = IA.SSID AND  
SUB.SUBCODE = IA.SUBCODE AND  
SUB.SEM = 8;
```

USN	SNAME	ADDRESS	PHONE	GENDER	CAT
1RN13CS091	TEESHA	BENGALURU	1232654578	F	AVERAGE
1RN13CS091	TEESHA	BENGALURU	1232654578	F	AVERAGE
1RN13CS091	TEESHA	BENGALURU	1232654578	F	OUTSTANDING
1RN13CS091	TEESHA	BENGALURU	1232654578	F	OUTSTANDING
1RN13CS091	TEESHA	BENGALURU	1232654578	F	AVERAGE