ASSIGNMENT – 04 (DBMS LAB)

LAB - ACTIVITY – 1

❖ **PROBLEM:**

Create a table student having attribute Std Id,Std Name,Sex,Percentage,Sclass,Sec,Stream,Dob and insert values.

➢ **PROGRAM:**

create table Ranjan_Jana(StdID number(30),StdName varchar2(30),Sex varchar2(30),Percentage number(30),sClass number(30),Sec varchar2(30),Stream varchar2(30),DOB varchar2(30),primary key(StdID));

✓ **OUTPUT:**

```
Table created.
```

➢ **PROGRAM:**

```
Describe Ranjan_Jana;
```

✓ **OUTPUT:**

Object Type **TABLE** Object **RANJAN_JANA**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
RANJAN_JANA	STDID	Number	-	30	0	1	-	-	-
	STDNAME	Varchar2	30	-	-	-	✔	-	-
	SEX	Varchar2	30	-	-	-	✔	-	-
	PERCENTAGE	Number	-	30	0	-	✔	-	-
	SCLASS	Number	-	30	0	-	✔	-	-
	SEC	Varchar2	30	-	-	-	✔	-	-
	STREAM	Varchar2	30	-	-	-	✔	-	-
	DOB	Varchar2	30	-	-	-	✔	-	-
									1 - 8

➢ **PROGRAM:**

insert into Ranjan_Jana values('891','RanBan CommerceMALE','78','12','C','Commerce','25/11/2000');

insert into Ranjan_Jana values('092','Sayan Krmakar','MALE','72','12','A','Science','10/11/2001');

insert into Ranjan_Jana values('093','sayan Dutta','MALE','75','12','A','Science','36/10/2003');

insert into Ranjan_Jana values('094','Shilpa Ojha','FEMALE','71','12','A','Science','10/11/2001');

insert into Ranjan_Jana values('095','sarolipi Pal','FEMALE','73','12','B','Commerce','10/11/2003');

insert into Ranjan_Jana values('096','Sampad Kar','MALE','73','12','A','Science','30/10/2001');

insert into Ranjan_Jana values('097','Sanjoy Mannna','MALE','75','12','C','Science','25/11/2000');

insert into Ranjan_Jana values('098','Raja Maity','MALE','78','12','B','Commerce','10/11/2000');

insert into Ranjan_Jana values('099','Swarup Jana','MALE','78','12','B','Commerce','10/11/2001');

insert into Ranjan_Jana values('100','Bishwanath Jana','MALE','75','12','A','Science','10/11/2000');

insert into Ranjan_Jana values('101','Suvadip Bera','MALE','73','12','C','Science','25/11/2003');

insert into Ranjan_Jana values('102','Furquan Mazity','MALE','75','12','C','Science','10/11/2001');

insert into Ranjan_Jana values('103','Soumyaip Pal','MALE','78','12','C','Commerce','12/11/2001');

insert into Ranjan_Jana values('104','Rahul Debnath','MALE','75','12','A','Science','10/10/2000');

insert into Ranjan_Jana values('105','Sourav Roy','MALE','78','12','B','Commerce','31/11/2003');

insert into Ranjan_Jana values('106','Bikram Bera','MALE','72','12','C','Science','15/11/2001');

insert into Ranjan_Jana values('107','Prabin Jha','MALE','85','12','B','Commerce','10/11/2000');

insert into Ranjan_Jana values('108','Prasun Jana','MALE','75','12','C','Science','14/01/2003');

insert into Ranjan_Jana values('109','Palash Bera','MALE','65','12','A','Science','16/10/2001');

insert into Ranjan_Jana values('110','Guddu Mallik','MALE','75','12','A','Science','19/01/2000');

insert into Ranjan_Jana values('111','olivia Jana','FEMALE','78','12','B','Commerce ','17/10/2001');

insert into Ranjan_Jana values('112','Alfred Novel','MALE','78','12','B','Commerce','13/10/2003');

insert into Ranjan_Jana values('113','Mamata Chowdhury','FEMALE','75','12','A','Science','10/11/2001');

insert into Ranjan_Jana values('114','Sweta Ojha','FEMALE','85','12','B','Commerce','25/11/2000');

insert into Ranjan_Jana values('115','Sayak Panda','MALE','90','12','C','Science','10/11/2001');

insert into Ranjan_Jana values('116','Bisa Bhuima','MALE','87','12','A','Science','28/11/2000');

insert into Ranjan_Jana values('117','Md Azad','MALE','75','12','A','Science','10/11/2001');

insert into Ranjan_Jana values('118','Diptesh Biswas','MALE','84','12','C','Science','10/11/2000');

insert into Ranjan_Jana values('119','kavaya Singh','FEMALE','78','12','B','Commerce','10/11/2000');

insert into Ranjan_Jana values('120','Rahul Mazumdar','MALE','96','12','A','Science','10/11/2003');

✓ **OUTPUT:**
```
Statement processed.
```

LAB - ACTIVITY – 2

➢ **PROGRAM:**

Select * from ranjan_jana;

✓ **OUTPUT:**

STDID	STDNAME	SEX	PERCENTAGE	SCLASS	SEC	STREAM	DOB
91	Ranjan Jana	MALE	78	12	C	Commerce	25/11/2000
92	Sayan Krmakar	MALE	72	12	A	Science	10/11/2001
93	sayan Dutta	MALE	75	12	A	Science	36/10/2003
94	Shilpa Ojha	FEMALE	71	12	A	Science	10/11/2001
95	sarolipi Pal	FEMALE	73	12	B	Commerce	10/11/2003
96	Sampad Kar	MALE	73	12	A	Science	30/10/2001
97	Sanjoy Mannna	MALE	75	12	C	Science	25/11/2000
98	Raja Maity	MALE	78	12	B	Commerce	10/11/2000
99	Swarup Jana	MALE	78	12	B	Commerce	10/11/2001
100	Bishwanath Jana	MALE	75	12	A	Science	10/11/2000
101	Suvadip Bera	MALE	73	12	C	Science	25/11/2003
102	Furquan Mazity	MALE	75	12	C	Science	10/11/2001
103	Soumyaip Pal	MALE	78	12	C	Commerce	12/11/2001
104	Rahul Debnath	MALE	75	12	A	Science	10/10/2000
105	Sourav Roy	MALE	78	12	B	Commerce	31/11/2003
106	Bikram Bera	MALE	72	12	C	Science	15/11/2001
107	Prabin Jha	MALE	85	12	B	Commerce	10/11/2000
108	Prasun Jana	MALE	75	12	C	Science	14/01/2003
109	Palash Bera	MALE	65	12	A	Science	16/10/2001
110	Guddu Mallik	MALE	75	12	A	Science	19/01/2000
111	olivia Jana	FEMALE	78	12	B	Commerce	17/10/2001
112	Alfred Novel	MALE	78	12	B	Commerce	13/10/2003
113	Mamata Chowdhury	FEMALE	75	12	A	Science	10/11/2001
114	Sweta Ojha	FEMALE	85	12	B	Commerce	25/11/2000
115	Sayak Panda	MALE	90	12	C	Science	10/11/2001
116	Bisa Bhuima	MALE	87	12	A	Science	28/11/2000
117	Md Azad	MALE	75	12	A	Science	10/11/2001
118	Diptesh Biswas	MALE	84	12	C	Science	10/11/2000
119	kavaya Singh	FEMALE	78	12	B	Commerce	10/11/2000
120	Rahul Mazumdar	MALE	96	12	A	Science	10/11/2003

❖ **PROBLEM:**

Display only student name and dob from student.

➢ **PROGRAM:**

select StdName,DOB from ranjan_jana;

✓ **OUTPUT:**

STDNAME	DOB
Ranjan Jana	25/11/2000
Sayan Krmakar	10/11/2001
sayan Dutta	36/10/2003
Shilpa Ojha	10/11/2001
sarolipi Pal	10/11/2003
Sampad Kar	30/10/2001
Sanjoy Mannna	25/11/2000
Raja Maity	10/11/2000
Swarup Jana	10/11/2001
Bishwanath Jana	10/11/2000
Suvadip Bera	25/11/2003
Furquan Mazity	10/11/2001
Soumyaip Pal	12/11/2001
Rahul Debnath	10/10/2000
Sourav Roy	31/11/2003
Bikram Bera	15/11/2001
Prabin Jha	10/11/2000
Prasun Jana	14/01/2003
Palash Bera	16/10/2001
Guddu Mallik	19/01/2000
olivia Jana	17/10/2001
Alfred Novel	13/10/2003
Mamata Chowdhury	10/11/2001
Sweta Ojha	25/11/2000
Sayak Panda	10/11/2001
Bisa Bhuima	28/11/2000
Md Azad	10/11/2001
Diptesh Biswas	10/11/2000
kavaya Singh	10/11/2000
Rahul Mazumdar	10/11/2003

❖ **PROBLEM:**

Display the students record where percentage is greater or equal to 80 from student table.

➢ **PROGRAM:**

select * from ranjan_jana where percentage>=80;

✓ **OUTPUT:**

STDID	STDNAME	SEX	PERCENTAGE	SCLASS	SEC	STREAM	DOB
107	Prabin Jha	MALE	85	12	B	Commerce	10/11/2000
114	Sweta Ojha	FEMALE	85	12	B	Commerce	25/11/2000
115	Sayak Panda	MALE	90	12	C	Science	10/11/2001
116	Bisa Bhuima	MALE	87	12	A	Science	28/11/2000
118	Diptesh Biswas	MALE	84	12	C	Science	10/11/2000
120	Rahul Mazumdar	MALE	96	12	A	Science	10/11/2003

❖ **PROBLEM:**

Display the student name,stream and percentage where percentage is more than 80 from student table.

➢ **PROGRAM:**

select StdName,Stream,Percentage from ranjan_jana where percentage>=80;

✓ **OUTPUT:**

STDNAME	STREAM	PERCENTAGE
Prabin Jha	Commerce	85
Sweta Ojha	Commerce	85
Sayak Panda	Science	90
Bisa Bhuima	Science	87
Diptesh Biswas	Science	84
Rahul Mazumdar	Science	96

❖ **PROBLEM:**

Display the students record of science students where percentage is more than 75 from student table.

➢ **PROGRAM:**

select * from ranjan_jana where stream='Science' and percentage>75;

✓ **OUTPUT:**

STDID	STDNAME	SEX	PERCENTAGE	SCLASS	SEC	STREAM	DOB
115	Sayak Panda	MALE	90	12	C	Science	10/11/2001
116	Bisa Bhuima	MALE	87	12	A	Science	28/11/2000
118	Diptesh Biswas	MALE	84	12	C	Science	10/11/2000
120	Rahul Mazumdar	MALE	96	12	A	Science	10/11/2003

LAB - ACTIVITY – 3

❖ **PROBLEM:**

Display the student table structure.

➢ **PROGRAM:**

Describe ranjan_jana;

✓ **OUTPUT:**

Object Type	TABLE	Object	RANJAN_JANA							
Table	**Column**	**Data Type**	**Length**	**Precision**	**Scale**	**Primary Key**	**Nullable**	**Default**	**Comment**	
RANJAN_JANA	STDID	Number	-	30	0	1	-	-	-	
	STDNAME	Varchar2	30	-	-	-	✓	-	-	
	SEX	Varchar2	30	-	-	-	✓	-	-	
	PERCENTAGE	Number	-	30	0	-	✓	-	-	
	SCLASS	Number	-	30	0	-	✓	-	-	
	SEC	Varchar2	30	-	-	-	✓	-	-	
	STREAM	Varchar2	30	-	-	-	✓	-	-	
	DOB	Varchar2	30	-	-	-	✓	-	-	
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❖ **PROBLEM:**

Add a column in the student table ,teacher ID.

➢ **PROGRAM:**

Alter table ranjan_jana add teacher_id varchar2(30);

✓ **OUTPUT:**

```
Table altered.
```

➢ **PROGRAM:**

```
Describe Ranjan_jana;
```

✓ **OUTPUT:**

Object Type	TABLE	Object	RANJAN_JANA							
Table	**Column**	**Data Type**	**Length**	**Precision**	**Scale**	**Primary Key**	**Nullable**	**Default**	**Comment**	
RANJAN_JANA	STDID	Number	-	30	0	1	-	-	-	
	STDNAME	Varchar2	30	-	-	-	✓	-	-	
	SEX	Varchar2	30	-	-	-	✓	-	-	
	PERCENTAGE	Number	-	30	0	-	✓	-	-	
	SCLASS	Number	-	30	0	-	✓	-	-	
	SEC	Varchar2	30	-	-	-	✓	-	-	
	STREAM	Varchar2	30	-	-	-	✓	-	-	
	DOB	Varchar2	30	-	-	-	✓	-	-	
	TEACHER_ID	Varchar2	30	-	-	-	✓	-	-	
									1 - 9	

➢ **PROGRAM:**

Select * from ranjan_jana;

✓ **OUTPUT:**

STDID	STDNAME	SEX	PERCENTAGE	SCLASS	SEC	STREAM	DOB	TEACHER_ID
91	Ranjan Jana	MALE	78	12	C	Commerce	25/11/2000	-
92	Sayan Krmakar	MALE	72	12	A	Science	10/11/2001	-
93	sayan Dutta	MALE	75	12	A	Science	36/10/2003	-
94	Shilpa Ojha	FEMALE	71	12	A	Science	10/11/2001	-
95	sarolipi Pal	FEMALE	73	12	B	Commerce	10/11/2003	-
96	Sampad Kar	MALE	73	12	A	Science	30/10/2001	-
97	Sanjoy Mannna	MALE	75	12	C	Science	25/11/2000	-
98	Raja Maity	MALE	78	12	B	Commerce	10/11/2000	-
99	Swarup Jana	MALE	78	12	B	Commerce	10/11/2001	-
100	Bishwanath Jana	MALE	75	12	A	Science	10/11/2000	-
101	Suvadip Bera	MALE	73	12	C	Science	25/11/2003	-
102	Furquan Mazity	MALE	75	12	C	Science	10/11/2001	-
103	Soumyaip Pal	MALE	78	12	C	Commerce	12/11/2001	-
104	Rahul Debnath	MALE	75	12	A	Science	10/10/2000	-
105	Sourav Roy	MALE	78	12	B	Commerce	31/11/2003	-
106	Bikram Bera	MALE	72	12	C	Science	15/11/2001	-
107	Prabin Jha	MALE	85	12	B	Commerce	10/11/2000	-
108	Prasun Jana	MALE	75	12	C	Science	14/01/2003	-
109	Palash Bera	MALE	65	12	A	Science	16/10/2001	-
110	Guddu Mallik	MALE	75	12	A	Science	19/01/2000	-
111	olivia Jana	FEMALE	78	12	B	Commerce	17/10/2001	-
112	Alfred Novel	MALE	78	12	B	Commerce	13/10/2003	-
113	Mamata Chowdhury	FEMALE	75	12	A	Science	10/11/2001	-
114	Sweta Ojha	FEMALE	85	12	B	Commerce	25/11/2000	-
115	Sayak Panda	MALE	90	12	C	Science	10/11/2001	-
116	Bisa Bhuima	MALE	87	12	A	Science	28/11/2000	-
117	Md Azad	MALE	75	12	A	Science	10/11/2001	-
118	Diptesh Biswas	MALE	84	12	C	Science	10/11/2000	-
119	kavaya Singh	FEMALE	78	12	B	Commerce	10/11/2000	-
120	Rahul Mazumdar	MALE	96	12	A	Science	10/11/2003	-

❖ **PROBLEM:**

Modify the teacher ID data type from character to integer.

➢ **PROGRAM:**

Alter table ranjan_jana modify teacher_ID number(30);

✓ **OUTPUT:**

```
Table dropped.
```

➢ **PROGRAM:**

```
Describe Ranjan_jana;
```

✓ **OUTPUT:**

Object Type **TABLE** Object **RANJAN_JANA**

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
RANJAN_JANA	STDID	Number	-	30	0	1	-	-	-
	STDNAME	Varchar2	30	-	-	-	✓	-	-
	SEX	Varchar2	30	-	-	-	✓	-	-
	PERCENTAGE	Number	-	30	0	-	✓	-	-
	SCLASS	Number	-	30	0	-	✓	-	-
	SEC	Varchar2	30	-	-	-	✓	-	-
	STREAM	Varchar2	30	-	-	-	✓	-	-
	DOB	Varchar2	30	-	-	-	✓	-	-
	TEACHER_ID	Number	-	30	0	-	✓	-	-
									1 - 9

LAB - ACTIVITY – 4

❖ **PROBLEM:**

Delete the teacher id attribute from the above table.

➢ **PROGRAM:**

alter table ranjan_jana drop column dob;

✓ **OUTPUT:**

```
Table dropped.
```

❖ **PROBLEM:**

Substract 5 from all students percentage and display name and percentage.

➢ **PROGRAM:**

select StdName,percentage-5 from ranjan_jana;

✓ **OUTPUT:**

STDNAME	PERCENTAGE-5
Ranjan Jana	73
Sayan Krmakar	67
sayan Dutta	70
Shilpa Ojha	66
sarolipi Pal	68
Sampad Kar	68
Sanjoy Mannna	70
Raja Maity	73
Swarup Jana	73
Bishwanath Jana	70
Suvadip Bera	68
Furquan Mazity	70
Soumyaip Pal	73
Rahul Debnath	70
Sourav Roy	73
Bikram Bera	67
Prabin Jha	80
Prasun Jana	70
Palash Bera	60
Guddu Mallik	70
olivia Jana	73
Alfred Novel	73
Mamata Chowdhury	70
Sweta Ojha	80
Sayak Panda	85
Bisa Bhuima	82
Md Azad	70
Diptesh Biswas	79
kavaya Singh	73
Rahul Mazumdar	91

❖ **PROBLEM:**

Display only StdName as student name and DOB as date of birth.

➢ **PROGRAM:**

select StdName as "Student name",DOB as "date of birth" from ranjan_jana;

✓ **OUTPUT:**

Student Name	Date Of Birth
Ranjan Jana	25/11/2000
Sayan Krmakar	10/11/2001
sayan Dutta	36/10/2003
Shilpa Ojha	10/11/2001
sarolipi Pal	10/11/2003
Sampad Kar	30/10/2001
Sanjoy Mannna	25/11/2000
Raja Maity	10/11/2000
Swarup Jana	10/11/2001
Bishwanath Jana	10/11/2000
Suvadip Bera	25/11/2003
Furquan Mazity	10/11/2001
Soumyaip Pal	12/11/2001
Rahul Debnath	10/10/2000
Sourav Roy	31/11/2003
Bikram Bera	15/11/2001
Prabin Jha	10/11/2000
Prasun Jana	14/01/2003
Palash Bera	16/10/2001
Guddu Mallik	19/01/2000
olivia Jana	17/10/2001
Alfred Novel	13/10/2003
Mamata Chowdhury	10/11/2001
Sweta Ojha	25/11/2000
Sayak Panda	10/11/2001
Bisa Bhuima	28/11/2000
Md Azad	10/11/2001
Diptesh Biswas	10/11/2000
kavaya Singh	10/11/2000
Rahul Mazumdar	10/11/2003

❖ PROBLEM:

Display the students name whose stream is not science.

➢ PROGRAM:

select StdName from ranjan_jana where stream<>'Science';

✓ OUTPUT:

STDNAME
Ranjan Jana
sarolipi Pal
Raja Maity
Swarup Jana
Soumyaip Pal
Sourav Roy
Prabin Jha
olivia Jana
Alfred Novel
Sweta Ojha
kavaya Singh

❖ PROBLEM:

Display the students name where percentage is between 60 And 80;

➢ PROGRAM:

select StdName,percentage from ranjan_jana where percentage>=60 and percentage<=80;

✓ OUTPUT:

STDNAME	PERCENTAGE
Ranjan Jana	78
Sayan Krmakar	72
sayan Dutta	75
Shilpa Ojha	71
sarolipi Pal	73
Sampad Kar	73
Sanjoy Mannna	75
Raja Maity	78
Swarup Jana	78
Bishwanath Jana	75
Suvadip Bera	73
Furquan Mazity	75
Soumyaip Pal	78
Rahul Debnath	75
Sourav Roy	78
Bikram Bera	72
Prasun Jana	75
Palash Bera	65
Guddu Mallik	75
olivia Jana	78
Alfred Novel	78
Mamata Chowdhury	75
Md Azad	75
kavaya Singh	78

LAB - ACTIVITY – 5

❖ **PROBLEM:**

Change a student name and percentage.

➢ **PROGRAM:**

update ranjan_jana set stdname='Surya Santra',percentage=89 where stdid=92;

✓ **OUTPUT:**

```
1 row(s) updated.
```

❖ **PROBLEM:**

Delete the records from student table where stdid=93;

➢ **PROGRAM:**

Delete from ranjan_jana where stdid=93;

✓ **OUTPUT:**

✓ ```1 row(s) deleted.```

❖ **PROBLEM:**

Type the following SQL statements and note output.

➢ **PROGRAM:**

select * from ranjan_jana where stdname like 'G_';

✓ **OUTPUT:**

```
NO DATA FOUND
```

➢ **PROGRAM:**

select * from ranjan_jana where stdname='G';

✓ **OUTPUT:**

```
NO DATA FOUND
```

➤ **PROGRAM:**

select * from ranjan_jana where stdname like 'G%';

✓ **OUTPUT:**

STDID	STDNAME	SEX	PERCENTAGE	SCLASS	SEC	STREAM	DOB	TEACHER_ID
110	Guddu Mallik	MALE	75	12	A	Science	19/01/2000	-

➤ **PROGRAM:**

select * from ranjan_jana where stdname='%G%';

✓ **OUTPUT:**

```
NO DATA FOUND
```

❖ **PROBLEM:**

Note the output of the following statement.

➤ **PROGRAM:**

select stdname,sex,stream from ranjan_jana where percentage between 70 and 80;

✓ **OUTPUT:**

STDNAME	SEX	STREAM
Ranjan Jana	MALE	Commerce
Shilpa Ojha	FEMALE	Science
sarolipi Pal	FEMALE	Commerce
Sampad Kar	MALE	Science
Sanjoy Mannna	MALE	Science
Raja Maity	MALE	Commerce
Swarup Jana	MALE	Commerce
Bishwanath Jana	MALE	Science
Suvadip Bera	MALE	Science
Furquan Mazity	MALE	Science
Soumyaip Pal	MALE	Commerce
Rahul Debnath	MALE	Science
Sourav Roy	MALE	Commerce
Bikram Bera	MALE	Science
Prasun Jana	MALE	Science
Guddu Mallik	MALE	Science
olivia Jana	FEMALE	Commerce
Alfred Novel	MALE	Commerce
Mamata Chowdhury	FEMALE	Science
Md Azad	MALE	Science
kavaya Singh	FEMALE	Commerce