

EXPERIMENT NO: - 007

Write a program to demonstrate different types of JOINS.

```
create table Ticket1 (PNR int Primary key,  
                    Ticket_ID int, Trainno int);  
create table Train1 (Trainno int Primary key,  
                   Tname varchar (50));  
insert into Ticket1 values (123456,110,12139);  
insert into Ticket1 values (123478,115,12465);  
insert into Ticket1 values (213445,415,21987);  
select * from Ticket1;
```

```
insert into Train1 values (12139,'Sewagram Exp');  
insert into Train1 values (12465,'Kamakhya Exp');  
insert into Train1 values (11078,'Gorakhpur Exp');  
select * from Train1;
```

```
# Equi join  
select *  
from Ticket1, Train1  
where Ticket1.Trainno = Train1.Trainno;
```

```
# join-on  
select*  
from Ticket1 inner join Train1  
on Ticket1.Trainno = Train1.Trainno;
```

```
select *  
from Ticket1 join Train1  
on Ticket1.Trainno = Train1.Trainno;
```

```
# Natural join  
select *  
from Ticket1  
natural join Train1;
```

```
# left join  
select *  
from Ticket1  
left join Train1 on Ticket1.Trainno = Train1.Trainno;
```

```
# Right join  
select*  
from Ticket1  
right join Train1 on Ticket1.Trainno = Train1.Trainno;
```

```
# Full join  
select *  
from Ticket1  
left join Train1 on Ticket1.Trainno = Train1.Trainno union
```

```
select *
from Ticket1
right join Train1 on Ticket1.Trainno = Train1.Trainno;
```

#Output: -

```
mysql> use rms_2 Database changed
mysql> create table Ticket1 (PNR int Primary
key,Ticket_ID
int,Trainno int); Query OK, 0 rows affected (0.04 sec)
```

```
mysql> create table Train1 (Trainno int Primary key,Tname varchar(50)); Query OK, 0 rows
affected (0.03 sec)
```

```
mysql> insert into Ticket1 values(123456,110,12139);
Query OK, 1 row affected(0.03 sec)
```

```
mysql> insert into Ticket1 values(123478,115,12465);
Query OK, 1 row affected(0.01 sec)
```

```
mysql> insert into Ticket1 values(213445,415,21987);
Query OK, 1 row affected(0.03 sec)
```

```
mysql> select * from Ticket1;
```

```
+      +      +      +
| PNR | Ticket_ID | Trainno |
+      +      +      +
| 123456 |      110 | 12139 |
| 123478 |      115 | 12465 |
| 213445 |      415 | 21987 |
+      +      +      +
3 rows in set (0.00 sec)
```

```
mysql> insert into Train1 values(12139,'Sewagram Exp'); Query OK, 1 row affected (0.01
sec)
```

```
mysql> insert into Train1 values(12465,'Kamakhya Exp'); Query OK, 1 row affected (0.01
sec)
```

```
mysql> insert into Train1 values(11078,'Gorakhpur Exp'); Query OK, 1 row affected (0.01
sec)
```

```
mysql> select * from Train1;
```

```
+      +      +
| Trainno | Tname      |
+      +      +
| 11078 | Gorakhpur Exp |
| 12139 | Sewagram Exp |
| 12465 | Kamakhya Exp |
+      +      + 3 rows in set (0.00 sec)
```

```
mysql> select *
```

```

-> from Ticket1, Train1
-> where Ticket1.Trainno = Train1.Trainno;
+      +      +      +      +      +
| PNR | Ticket_ID | Trainno | Trainno | Tname |
+      +      +      +      +      +
| 123456 |      110 | 12139 | 12139 | Sewagram Exp |
| 123478 |      115 | 12465 | 12465 | Kamakhya Exp |
+      +      +      +      +      +
2 rows in set (0.00 sec) mysql> select *

```

```

-> from Ticket1
-> inner join Train1
-> on Ticket1.Trainno = Train1.Trainno;
+      +      +      +      +      +
| PNR | Ticket_ID | Trainno | Trainno | Tname |
+      +      +      +      +      +
| 123456 |      110 | 12139 | 12139 | Sewagram Exp |
| 123478 |      115 | 12465 | 12465 | Kamakhya Exp |
+      +      +      +      +      +
2 rows in set (0.00 sec)

```

```

mysql> select *
-> from Ticket1
-> join Train1
-> on Ticket1.Trainno = Train1.Trainno;
+      +      +      +      +      +
| PNR | Ticket_ID | Trainno | Trainno | Tname |
+      +      +      +      +      +
| 123456 |      110 | 12139 | 12139 | Sewagram Exp |
| 123478 |      115 | 12465 | 12465 | Kamakhya Exp |
+      +      +      +      +      +
2 rows in set (0.00 sec)

```

```

mysql> select *
-> from Ticket1
-> natural join Train1;
++      +      +      +
| Trainno | PNR | Ticket_ID | Tname |
++      +      +      +
| 12139 | 123456 |      110 | Sewagram Exp |
| 12465 | 123478 |      115 | Kamakhya Exp |
+      +      +      +      +
2      rows in set (0.01 sec)

```

```

mysql> select *
-> from Ticket1
-> left join Train1 on Ticket1.Trainno = Train1.Trainno;
+      +      +      +      +      +
| PNR | Ticket_ID | Trainno | Trainno | Tname |
+      +      +      +      +      +

```

123456	110	12139	12139	Sewagram Exp
123478	115	12465	12465	Kamakhya Exp
213445	415	21987	NULL	NULL
+	+	+	+	+

3 rows in set (0.00 sec)

```
mysql> select *
-> from Ticket1
-> right join Train1 on Ticket1.Trainno = Train1.Trainno;
```

+	+	+	+	+	+
PNR	Ticket_ID	Trainno	Trainno	Tname	
+	+	+	+	+	+
NULL	NULL	NULL	11078	Gorakhpur Exp	
123456	110	12139	12139	Sewagram Exp	

123478	115	12465	12465	Kamakhya Exp	
+	+	+	+	+	+

3 rows in set (0.00 sec)

```
mysql> select *
-> from Ticket1
-> left join Train1 on Ticket1.Trainno = Train1.Trainno
-> union
-> select *
-> from Ticket1
-> right join Train1 on Ticket1.Trainno = Train1.Trainno;
```

+	+	+	+	+	+
PNR	Ticket_ID	Trainno	Trainno	Tname	
+	+	+	+	+	+
123456	110	12139	12139	Sewagram Exp	
123478	115	12465	12465	Kamakhya Exp	
213445	415	21987	NULL	NULL	
NULL	NULL	NULL	11078	Gorakhpur Exp	
+	+	+	++		

+ 4 rows in set (0.00 sec)