

## BART MANAGEMENT SYSTEM - DEMO

### BASIC QUERIES

```
MariaDB [19767om]> insert into PASSENGER values(22, "Imade Ada", "324 Longitude Drive, Antioch", 345768998, "Imadee@gmail.com", 1131);
```

```
Query OK, 1 row affected (0.003 sec)
```

```
MariaDB [19767om]> select * from PASSENGER;
```

Passenger_id	Passenger_name	Address	Phone	Email	Trip_id
1	Tom Brown	12, Washington boulevard,NY	431267271	tombrown@yahoo.com	1110
2	Joyce Gate	54, San Mateo,CA	672347983	joycel21@gmail.com	1111
3	Jane George	127, Brooklyn Street,NY	257890412	Georgejane@yahoo.com	1112
4	Mason Anderson	1452, Piper Court,IN	812345908	masonanderson@gmail.com	1113
5	Nana Yaw	381, 82nd Avenue,IL	821673710	ynana@yahoo.com	1114
6	Peter Blakes	712, Mission Court,FL	453218906	peterblakes71@gmail.com	1157
7	Grace Dowe	1210, Atlantic Blvd, TX	912345763	Gracedowe@gmail.com	1162
8	Robert Lee	420, Santa Clara, CA	389486309	Robertss@gmail.com	1159
9	Ellen Smith	601, Main Street,UT	650812745	Ellensmith@yahoo.com	1163
10	Lucy Miller	116, State College Blvd,MO	712908321	lucymiller@gmail.com	1164
11	Iris Watson	191, Dolor Avenue,NH	908765325	watsoniris@gmail.com	1176
12	Lawrence Moreno	7292, San Antonio,MI	651908768	lawrenzo@gmail.com	1177
13	Calista Wise	841, Roseville Street, NH	221356908	wcalister@yahoo.com	1178
14	Bianca Jacobs	222, Miami Beach, ND	310986432	bjacobs@yahoo.com	1180
15	Judith Floyd	184, Savannah Illinois, IL	453218907	judithh@gmail.com	1185
16	Daniel Malone	3217, Princeton Avenue, TX	908712346	danielmalone@gmail.com	1125
17	Rebecca Scott	597, Green Bay,IN	908712346	rebscott@gmail.com	1126
18	Peter Anderson	901, Mountain Hill,NC	907521087	peteanders@gmail.com	1127
19	Kim Fletcher	191, Semper Avenue,NJ	531980764	fletcher@yahoo.com	1128
20	Aaron Sutton	1429, Reedsport Rd,NY	884670941	aaronme@yahoo.com	1129
21	Willow Smith	3415, Rocky Mount,WA	764123809	willsmith@yahoo.com	1130
22	Imade Ada	324 Longitude Drive, Antioch	345768998	Imadee@gmail.com	1131

```
22 rows in set (0.000 sec)
```

```
MariaDB [19767om]> select * from PASSENGER where Passenger_name like "L%";
```

Passenger_id	Passenger_name	Address	Phone	Email	Trip_id
10	Lucy Miller	116, State College Blvd,MO	712908321	lucymiller@gmail.com	1164
12	Lawrence Moreno	7292, San Antonio,MI	651908768	lawrenzo@gmail.com	1177

```
2 rows in set (0.000 sec)
```

```
MariaDB [19767om]> update TRIP set Fare = 5 where Trip_id = 1178;
```

```
Query OK, 1 row affected (0.002 sec)
```

```
Rows matched: 1 Changed: 1 Warnings: 0
```

```
MariaDB [19767om]> drop Table STATION;
```

```
Query OK, 0 rows affected (0.013 sec)
```

```
MariaDB [19767om]> alter table PASSENGER add foreign key(Trip_id) references TRIP(Trip_id);
```

```
Query OK, 22 rows affected (0.036 sec)
```

```
Records: 22 Duplicates: 0 Warnings: 0
```

# BART MANAGEMENT SYSTEM - DEMO

## ADVANCED QUERIES

MariaDB [197670m]> select Passenger\_id, Passenger\_name, Phone, Trip\_id from PASSENGER where Trip\_id in (select Trip\_id from TRIP);

Passenger_id	Passenger_name	Phone	Trip_id
1	Tom Brown	431267271	1110
2	Joyce Gate	672347983	1111
3	Jane George	257890412	1112
4	Mason Anderson	812345908	1113
5	Nana Yaw	821673710	1114
6	Peter Blakes	453218906	1157
7	Grace Dowey	912345763	1162
8	Robert Lee	389486309	1159
9	Ellen Smith	650812745	1163
10	Lucy Miller	712908321	1164
11	Iris Watson	908765325	1176
12	Lawrence Moreno	651908768	1177
13	Calista Wise	221356908	1178
14	Bianca Jacobs	310986432	1180
15	Judith Floyd	453218907	1185
16	Daniel Malone	908712346	1125
17	Rebecca Scott	908712346	1126
18	Peter Anderson	907521087	1127
19	Kim Fletcher	531980764	1128
20	Aaron Sutton	884670941	1129
21	Willow Smith	764123809	1130
22	Imade Ada	345768998	1131

22 rows in set (0.000 sec)

MariaDB [197670m]> select \* from TRAIN inner join STATIONS where TRAIN.T\_id = STATIONS.Train\_id group by Train\_id;

T_id	T_type	Seating_capacity	Line_color	Station_id	Station_name	Train_id
1	A2	60	Green	145	Berryessa/North San Jose	1
2	B2	60	Blue	127	San Francisco Airport(SFO)	2
3	C1	56	Yellow	148	Castro Valley	3
4	C2	56	Red	133	Ashby	4
5	D3	60	Orange	110	MacArthur	5

5 rows in set (0.001 sec)

MariaDB [197670m]> select D\_id, D\_name, "Salary(\$)", D\_ssn, TRAIN.T\_id, Line\_color or from DRIVER inner join TRAIN on DRIVER.T\_id = TRAIN.T\_id;

D_id	D_name	Salary(\$)	D_ssn	T_id	Line_color
201	Paul Mitcher	Salary(\$)	453217098	1	Green
202	Bright Johnson	Salary(\$)	654217048	2	Blue
203	Dwayne Smith	Salary(\$)	542098731	3	Yellow
204	Lee Jones	Salary(\$)	882165731	4	Red
205	Jones Sutton	Salary(\$)	763097622	5	Orange
206	Paul Walker	Salary(\$)	321986099	2	Blue
207	James Wright	Salary(\$)	431907792	1	Green
208	Thomas White	Salary(\$)	721876042	5	Orange
209	James Brown	Salary(\$)	319086432	4	Red
210	Bonny Seth	Salary(\$)	123780892	5	Orange

10 rows in set (0.000 sec)

## BART MANAGEMENT SYSTEM - DEMO

```
MariaDB [19767cm]> SELECT PASSENGER.Passenger_name, PASSENGER.Trip_id, TRIP.`Fare($)`, TRIP.`Time_duration(mins)`, Blue_Green_Lines.Blue_line_train_id, Blue_Green_Lines.Green_line_train_id FROM PASSENGER INNER JOIN TRIP ON PASSENGER.Trip_id = TRIP.Trip_id INNER JOIN Blue_Green_Lines on Blue_Green_Lines.Station_id = TRIP.Start_station_id or Blue_Green_Lines.Station_id = TRIP.End_station_id;
```

Passenger_name	Trip_id	Fare(\$)	Time_duration(mins)	Blue_line_train_id	Green_line_train_id
Iris Watson	1176	8.5	82	3	1
Lawrence Moreno	1177	8.55	84	3	1
Calista Wise	1178	5	6	3	1
Calista Wise	1178	5	6	3	1
Bianca Jacobs	1180	3.55	10	3	1
Bianca Jacobs	1180	3.55	10	3	1
Judith Floyd	1185	4.4	21	3	1
Judith Floyd	1185	4.4	21	3	1
Willow Smith	1130	8.95	84	3	1
Imade Ada	1131	8.8	82	3	1

10 rows in set (0.000 sec)

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```
MariaDB [19767cm]> select
```

```
->     `YELLOW_LINE`.`Station_id` AS `Station_id`,
->     `YELLOW_LINE`.`Station_name` AS `Connecting_stations`
-> from ( ( ( (
->             `YELLOW_LINE`
->             join `GREEN_LINE` on(
->                 `YELLOW_LINE`.`Station_name` = `GREEN_LINE`.`Station_name`
->             )
->         )
->         join `BLUE_LINE` on(
->             `YELLOW_LINE`.`Station_name` = `BLUE_LINE`.`Station_name`
->         )
->     )
-> )
-> );
```

Station_id	Connecting_stations
113	West Oakland
114	Embarcadero
115	Montgomery St
118	16th St Mission
119	24th St Mission
120	Glen Park
121	Balboa Park
122	Daly City

8 rows in set (0.001 sec)

# BART MANAGEMENT SYSTEM - DEMO

MariaDB [197670m]> select distinct PASSENGER.Passenger\_name, TRIP.Trip\_id, TRIP.Start\_station\_id, START\_STATIONS.Start\_stations, TRIP.End\_station\_id, END\_STATIONS.End\_s  
tation, TRIP.'Fare(\$)', TRIP.'Time\_duration(mins)' from TRIP natural join PASSENGER natural join START\_STATIONS natural join END\_STATIONS;

Passenger_name	Trip_id	Start_station_id	Start_stations	End_station_id	End_station	Fare(\$)	Time_duration(mins)
Tom Brown	1110	145	Berryessa/North San Jose	144	Milipitas	2.15	6
Joyce Gate	1111	145	Berryessa/North San Jose	143	Warm Springs/South Fremont	3.1	13
Jane George	1112	145	Berryessa/North San Jose	142	Fremont	3.85	19
Mason Anderson	1113	145	Berryessa/North San Jose	141	Union City	4.2	24
Nana Yaw	1114	145	Berryessa/North San Jose	140	South Hayward	4.75	29
Peter Blakes	1157	100	Antioch	101	Pittsburg Centre	2.15	7
Grace Dowey	1162	100	Antioch	106	Walnut Creek	4.6	39
Robert Lee	1159	100	Antioch	103	North Concord/Martinez	3.75	23
Ellen Smith	1163	100	Antioch	107	Lafayette	5	39
Lucy Miller	1164	100	Antioch	108	Orinda	5.4	44
Iris Watson	1176	100	Antioch	120	Glen Park	8.5	82
Lawrence Moreno	1177	100	Antioch	121	Balboa Park	8.55	84
Calista Wise	1178	113	West Oakland	114	Embarcadero	5	6
Bianca Jacobs	1180	113	West Oakland	116	Powell St	3.55	10
Bianca Jacobs	1180	113	West Oakland	116	Powell	3.55	10
Judith Floyd	1185	113	West Oakland	121	Balboa Park	4.4	21
Daniel Malone	1125	145	Berryessa/North San Jose	129	El Cerrito del Norte	7.3	75
Rebecca Scott	1126	145	Berryessa/North San Jose	128	Richmond	7.5	80
Peter Anderson	1127	145	Berryessa/North San Jose	112	12th St/Oakland	6.5	56
Kim Fletcher	1128	145	Berryessa/North San Jose	111	19th St/Oakland	6.5	61
Aaron Sutton	1129	145	Berryessa/North San Jose	110	MacArthur	6.6	62
Willow Smith	1130	145	Berryessa/North San Jose	122	Daly City	8.95	84
Inade Ada	1131	145	Berryessa/North San Jose	121	Balboa Park	8.8	82

23 rows in set (0.008 sec)

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```
MariaDB [197670m]> select
->   `RED_LINE`.`Station_id` AS `Station_id`,
->   `RED_LINE`.`Station_name` AS `Station_name`,
->   `RED_LINE`.`Train_id` AS `Train_id`
-> from `RED_LINE`
-> union
-> select
->   `BLUE_LINE`.`Station_id` AS `Station_id`,
->   `BLUE_LINE`.`Station_name` AS `Station_name`,
->   `BLUE_LINE`.`Train_id` AS `Train_id`
-> from `BLUE_LINE`
-> union
-> select
->   `YELLOW_LINE`.`Station_id` AS `Station_id`,
->   `YELLOW_LINE`.`Station_name` AS `Station_name`,
->   `YELLOW_LINE`.`Train_id` AS `Train_id`
-> from `YELLOW_LINE`
-> union
-> select
->   `GREEN_LINE`.`Station_id` AS `Station_id`,
->   `GREEN_LINE`.`Station_name` AS `Station_name`,
->   `GREEN_LINE`.`Train_id` AS `Train_id`
-> from `GREEN_LINE`
-> union
-> select
->   `ORANGE_LINE`.`Station_id` AS `Station_id`,
->   `ORANGE_LINE`.`Station_name` AS `Station_name`,
->   `ORANGE_LINE`.`Train_id` AS `Train_id`
-> from `ORANGE_LINE`
-> group by
->   `ORANGE_LINE`.`Train_id`
-> order by `Station_id` limit 20;
```

# BART MANAGEMENT SYSTEM - DEMO

Station_id	Station_name	Train_id
100	Antioch	2
101	Pittsburg Centre	2
102	Pittsburg/Bay Point	2
103	North Concord/Martinez	2
104	Concord	2
105	Pleasant Hill	2
106	Walnut Creek	2
107	Lafayette	2
108	Orinda	2
109	Rockridge	2
110	MacArthur	5
110	MacArthur	4
110	MacArthur	2
111	19th St/Oakland	4
111	19th St/Oakland	2
112	12th St/Oakland	2
112	12th St/Oakland	4
113	West Oakland	1
113	West Oakland	4
113	West Oakland	2

20 rows in set (0.001 sec)

MariaDB [197670m]> select \* from TRIP left outer join Blue\_Yellow\_Lines on TRIP.Start\_station\_id = Blue\_Yellow\_Lines.Station\_id where Station\_id is not null;

Trip_id	Start_station_id	End_station_id	Fare(\$)	Time_duration(mins)	Station_id	Station_name	Blue_line_train_id	Yellow_line_train_id
1178	113	114	5	6	113	West Oakland	3	2
1179	113	115	3.55	8	113	West Oakland	3	2
1180	113	116	3.55	10	113	West Oakland	3	2
1181	113	117	3.55	14	113	West Oakland	3	2
1182	113	118	3.85	14	113	West Oakland	3	2
1183	113	119	3.95	17	113	West Oakland	3	2
1184	113	120	4.2	24	113	West Oakland	3	2
1185	113	121	4.4	21	113	West Oakland	3	2
1186	113	122	4.6	25	113	West Oakland	3	2
1187	113	134	2.15	7	113	West Oakland	3	2
1188	113	135	2.15	11	113	West Oakland	3	2
1189	113	136	2.4	14	113	West Oakland	3	2
1190	113	137	2.95	17	113	West Oakland	3	2
1191	113	138	3.4	21	113	West Oakland	3	2
1192	113	146	5	39	113	West Oakland	3	2
1193	113	147	4.85	39	113	West Oakland	3	2
1194	113	148	3.8	26	113	West Oakland	3	2

17 rows in set (0.000 sec)

Activate Windows

Go to Settings to activate Wi