

DBMS

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PES1UG20CS667

K Section

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```
create table train(train_no integer, train_name varchar(10) unique not null, train_arrival varchar(10), train_dest varchar(10),
train_availability varchar(10) default 'Yes', train_type varchar(10) not null, primary key(train_no));
```

```
MariaDB [CS667_RR]> desc train;
```

Field	Type	Null	Key	Default	Extra
train_no	int(11)	NO	PRI	NULL	
train_name	varchar(10)	NO	UNI	NULL	
train_arrival	varchar(10)	YES		NULL	
train_dest	varchar(10)	YES		NULL	
train_availability	varchar(10)	YES		Yes	
train_type	varchar(10)	NO		NULL	

```
6 rows in set (0.012 sec)

MariaDB [CS667_RR]>
```

```
create table compartment(ctype integer, cno varchar(10), ccapacity integer, cavailability varchar(10) default 'Yes', train_no integer, foreign
key(train_no) references train(train_no), primary key(cno,train_no));
```

```
MariaDB [CS667_RR]> desc compartment;
```

Field	Type	Null	Key	Default	Extra
ctype	int(11)	YES		NULL	
cno	varchar(10)	NO	PRI	NULL	
ccapacity	int(11)	YES		NULL	
cavailability	varchar(10)	YES		Yes	
train_no	int(11)	NO	PRI	NULL	

```
5 rows in set (0.014 sec)

MariaDB [CS667_RR]>
```

```
create table route_info(from_station_no integer, from_station_name varchar(10), to_station_no integer, to_station_name varchar(10),
distance integer, train_no integer, foreign key(train_no) references train(train_no), primary
key(from_station_no,to_station_no,train_no));
```

```
MariaDB [CS667_RR]> desc route_info;
```

Field	Type	Null	Key	Default	Extra
from_station_no	int(11)	NO	PRI	NULL	
from_station_name	varchar(10)	YES		NULL	
to_station_no	int(11)	NO	PRI	NULL	
to_station_name	varchar(10)	YES		NULL	
distance	int(11)	YES		NULL	
train_no	int(11)	NO	PRI	NULL	

```
6 rows in set (0.014 sec)

MariaDB [CS667_RR]>
```

```
create table user(user_id integer, user_type varchar(10), fname varchar(10), lname varchar(10), age integer, dob integer, pincode integer, street_no integer, primary key(user_id));
```

```
MariaDB [CS667_RR]> create table user(user_id integer, user_type varchar(10), fname varchar(10), lname varchar(10), age integer, dob integer, pincode integer, street_no integer, primary key(user_id));
Query OK, 0 rows affected (0.039 sec)
```

```
MariaDB [CS667_RR]> desc user;
```

Field	Type	Null	Key	Default	Extra
user_id	int(11)	NO	PRI	NULL	
user_type	varchar(10)	YES		NULL	
fname	varchar(10)	YES		NULL	
lname	varchar(10)	YES		NULL	
age	int(11)	YES		NULL	
dob	int(11)	YES		NULL	
pincode	int(11)	YES		NULL	
street_no	int(11)	YES		NULL	

```
8 rows in set (0.013 sec)
```

```
MariaDB [CS667_RR]>
```

```
create table user_train(date_time_stamp integer,train_no integer, foreign key(train_no) references train(train_no),user_id integer, foreign key(user_id) references user(user_id), primary key(date_time_stamp,user_id,train_no));
```

```
MariaDB [CS667_RR]> desc user_train;
```

Field	Type	Null	Key	Default	Extra
date_time_stamp	int(11)	NO	PRI	NULL	
train_no	int(11)	NO	PRI	NULL	
user_id	int(11)	NO	PRI	NULL	

```
3 rows in set (0.015 sec)
```

```
MariaDB [CS667_RR]> _
```

```
create table ticket(pnr integer, train_number integer, travel_date varchar(10), departure varchar(10), arrival varchar(10), dep_time varchar(10), arr_time varchar(10), train_type varchar(10), compartment_type varchar(10), compartment_no integer,user_id integer, foreign key(user_id) references user(user_id));
```

```
MariaDB [CS667_RR]> desc ticket;
```

Field	Type	Null	Key	Default	Extra
pnr	int(11)	NO	PRI	NULL	
train_number	int(11)	YES		NULL	
travel_date	varchar(10)	YES		NULL	
departure	varchar(10)	YES		NULL	
arrival	varchar(10)	YES		NULL	
dep_time	varchar(10)	YES		NULL	
arr_time	varchar(10)	YES		NULL	
train_type	varchar(10)	YES		NULL	
compartment_type	varchar(10)	YES		NULL	
compartment_no	int(11)	YES		NULL	
user_id	int(11)	NO	PRI	NULL	

```
11 rows in set (0.015 sec)
```

```
MariaDB [CS667_RR]>
```

```
create table user_phone(user_id integer, phone_no integer, primary key(user_id,phone_no), foreign key(user_id)
references user(user_id));
```

```
MariaDB [CS667_RR]> desc user_phone;
```

Field	Type	Null	Key	Default	Extra
phone_no	int(11)	NO	PRI	NULL	
user_id	int(11)	NO	PRI	NULL	

```
2 rows in set (0.029 sec)
```

```
MariaDB [CS667_RR]> _
```

```
create table payment_info(transaction_id integer, bank varchar(10), card_no integer, price integer, pnr integer, foreign
key(pnr) references ticket(pnr), primary key(transaction_id));
```

```
MariaDB [CS667_RR]> create table payment_info(transaction_id integer, bank varchar(10), card_no integer,
price integer, pnr integer, foreign key(pnr) references ticket(pnr), primary key(transaction_id));
Query OK, 0 rows affected (0.043 sec)
```

```
MariaDB [CS667_RR]> desc payment_info;
```

Field	Type	Null	Key	Default	Extra
transaction_id	int(11)	NO	PRI	NULL	
bank	varchar(10)	YES		NULL	
card_no	int(11)	YES		NULL	
price	int(11)	YES		NULL	
pnr	int(11)	YES	MUL	NULL	

```
5 rows in set (0.015 sec)
```

```
MariaDB [CS667_RR]>
```

create table ticket_passenger(seat_no integer, pname varchar(10), age integer check (age>5), pnr integer, foreign key(pnr) references ticket(pnr), primary key(seat_no));

```
MariaDB [CS667_RR]> desc ticket_passenger;
```

Field	Type	Null	Key	Default	Extra
seat_no	int(11)	NO	PRI	NULL	
pname	varchar(10)	YES		NULL	
age	int(11)	YES		NULL	
pnr	int(11)	NO	PRI	NULL	

```
4 rows in set (0.015 sec)

MariaDB [CS667_RR]>
```

create table fare_table(train_type varchar(10), compartment_type varchar(10), fare_per_km integer,primary key(train_type, compartment_type));

```
MariaDB [CS667_RR]> create table fare_table(train_type varchar(10), compartment_type varchar(10), fare_per_km integer,primary key(train_type, compartment_type));
Query OK, 0 rows affected (0.037 sec)

MariaDB [CS667_RR]> desc fare_table;
```

Field	Type	Null	Key	Default	Extra
train_type	varchar(10)	NO	PRI	NULL	
compartment_type	varchar(10)	NO	PRI	NULL	
fare_per_km	int(11)	YES		NULL	

```
3 rows in set (0.016 sec)

MariaDB [CS667_RR]>
```

Renaming:

alter table fare_table rename to fare_calculation;

```
MariaDB [CS667_RR]> show tables;
+-----+
| Tables_in_cs667_rr |
+-----+
| compartment        |
| fare_table         |
| payment_info       |
| route_info         |
| ticket             |
| ticket_passenger   |
| train              |
| user               |
| user_phone         |
| user_train         |
+-----+
10 rows in set (0.001 sec)

MariaDB [CS667_RR]> alter table fare_table rename to fare_calculation;
Query OK, 0 rows affected (0.024 sec)

MariaDB [CS667_RR]> show tables;
+-----+
| Tables_in_cs667_rr |
+-----+
| compartment        |
| fare_calculation    |
| payment_info       |
| route_info         |
| ticket             |
| ticket_passenger   |
| train              |
| user               |
| user_phone         |
| user_train         |
+-----+
10 rows in set (0.001 sec)

MariaDB [CS667_RR]>
```

Truncate:

insert into fare_calculation(train_type, compartment_type, fare_per_km) values ("AC", "3 Tier", 10);

truncate table fare_calculation;

```

MariaDB [CS667_RR]> insert into fare_calculation(train_type, compartment_type, fare_per_km) values ("AC", "3 Tier", 10);
Query OK, 1 row affected (0.011 sec)

MariaDB [CS667_RR]> select * from fare_calculation;
+-----+-----+-----+
| train_type | compartment_type | fare_per_km |
+-----+-----+-----+
| AC        | 3 Tier          | 10          |
+-----+-----+-----+
1 row in set (0.001 sec)

MariaDB [CS667_RR]> truncate table fare_calculation;
Query OK, 0 rows affected (0.060 sec)

MariaDB [CS667_RR]> select * from fare_calculation;
Empty set (0.001 sec)

MariaDB [CS667_RR]>

```

Delete:

drop table fare_calculation;

```

MariaDB [CS667_RR]> show tables;
+-----+
| Tables_in_cs667_rr |
+-----+
| compartment         |
| fare_calculation    |
| payment_info        |
| route_info          |
| ticket              |
| ticket_passenger    |
| train               |
| user                |
| user_phone          |
| user_train          |
+-----+
10 rows in set (0.001 sec)

MariaDB [CS667_RR]> drop table fare_calculation;
Query OK, 0 rows affected (0.023 sec)

MariaDB [CS667_RR]> show tables;
+-----+
| Tables_in_cs667_rr |
+-----+
| compartment         |
| payment_info        |
| route_info          |
| ticket              |
| ticket_passenger    |
| train               |
| user                |
| user_phone          |
| user_train          |
+-----+
9 rows in set (0.001 sec)

MariaDB [CS667_RR]>

```