

```
SET search_path TO railway_db;
```

```
CREATE TABLE station
```

```
(
```

```
    sid integer not null,  
    station_latitude numeric,  
    waiting_room_availability boolean,  
    name varchar(20) not null,  
    food_availability boolean,
```

```
    CONSTRAINT station_pkey PRIMARY KEY (sid)
```

```
);
```

```
alter table station add column pid integer references passenger(pid) ON DELETE CASCADE ON UPDATE CASCADE;
```

```
alter table station add column E_ID integer references employee(E_ID ) ON DELETE CASCADE ON UPDATE CASCADE;
```

```
alter table station add column TRAIN_ID varchar(20) references train(train_id) ON DELETE CASCADE ON UPDATE CASCADE;
```

```
ALTER TABLE station ADD foreign key (PID)
```

```
REFERENCES passenger(PID);
```

```
ALTER TABLE station ADD foreign key (E_ID )
```

```
references employee(E_ID );
```

```
ALTER TABLE station ADD foreign key (train_id)
```

```
references train(train_id);
```

```
CREATE TABLE passenger
```

```
(
```

```
    pid integer not null,  
    fname varchar(20) not null,  
    lname varchar(20) not null,  
    age numeric(3),  
    gender varchar(1) CHECK(gender IN('M','F','O')),  
    gov_id varchar(50) not null,  
    dob date,  
    mobile_no integer,
```

```
    CONSTRAINT passenger_pkey PRIMARY KEY (pid)
```

```
);
```

```
alter table passenger add constraint NAME unique(fname,lname);
```

```
CREATE TABLE lost_and_found
```

```
(
```

```
    item_id integer not null,  
    ITEM_NAME VARCHAR(100) not null,  
    LOCATION VARCHAR(200),
```

```
STATUS varchar(2) default 'not found' ,
item_description varchar(100),
sid integer references station(sid),
    CONSTRAINT lost_and_found_pkey PRIMARY KEY (item_id)
);
```

```
ALTER TABLE lost_and_found ADD foreign key (SID)
REFERENCES station(SID);
```

```
-----
CREATE TABLE parcel_service
(
    par_id integer not null,
    sid integer references station(sid),
    source VARCHAR(200),
    destination varchar(20),
    CONSTRAINT parcel_service_pkey PRIMARY KEY (par_id)
);
```

```
ALTER TABLE parcel_service ADD foreign key (SID)
REFERENCES station(SID);
```

```
-----
CREATE TABLE booking_details
(
    pid integer REFERENCES passenger(PID) ON DELETE CASCADE ON UPDATE CASCADE,
    TRAIN_ID varchar(30) references train(train_id) ON DELETE CASCADE ON UPDATE CASCADE,
    dep_time timestamp,
    dep_location VARCHAR(100),
    arrival_location varchar(100),
    availability varchar(3) CHECK(availability IN('yes','no')),
    sid integer references station(sid) ON DELETE CASCADE ON UPDATE CASCADE,
);
```

```
ALTER TABLE booking_details ADD foreign key (SID)
REFERENCES station(SID);
```

```
-----
CREATE TABLE transaction_details
(
    TRA_ID integer not null,
    pid integer REFERENCES passenger(PID) ON DELETE CASCADE ON UPDATE CASCADE,
    AMOUNT integer not null,
    TRANSACTION_DATE date,
    TRANSACTION_TIME timestamp,
    CONSTRAINT transaction_details_pkey PRIMARY KEY (TRA_ID)
);
```

```
ALTER TABLE transaction_details ADD foreign key (PID)
REFERENCES passenger(PID);
```

```
-----
CREATE TABLE train
```

```
(
    train_id varchar(20) not null,
    TRAIN_NAME VARCHAR(100) not null,
    t_source VARCHAR(100),
    t_DESTINATION VARCHAR(100),
    E_ID integer references employee(E_ID ) ON DELETE CASCADE ON UPDATE CASCADE,
    CONSTRAINT train_pkey PRIMARY KEY (train_id)
```

```
);
```

```
ALTER TABLE train ADD foreign key (E_ID )
references employee(E_ID );
```

```
-----
CREATE TABLE ticket
```

```
(
    ticket_id varchar(20) not null,
    pid integer references passenger(pid) ON DELETE CASCADE ON UPDATE CASCADE, TRA_ID integer
references transaction_details(TRA_ID) ON DELETE CASCADE ON UPDATE CASCADE, TRAIN_ID
varchar(30) references train(train_id) ON DELETE CASCADE ON UPDATE CASCADE, CONSTRAINT
ticket_pkey PRIMARY KEY (ticket_id)
);
```

```
ALTER TABLE ticket ADD foreign key (PID)
REFERENCES passenger(PID);
```

```
ALTER TABLE ticket ADD foreign key (TRA_ID)
references transaction_details(TRA_ID);
```

```
ALTER TABLE ticket ADD foreign key (train_id)
references train(train_id);
```

```
-----
CREATE TABLE employee
```

```
(
    E_ID INTEGER PRIMARY KEY,
    age INTEGER,
    fname VARCHAR(100) NOT NULL,
    lname VARCHAR(100) NOT NULL,
    pan_no VARCHAR(10) NOT NULL UNIQUE,
    mobile_no NUMERIC(10) UNIQUE,
    sid INTEGER REFERENCES station,
    DES_ID INTEGER REFERENCES DESIGNATION
);
```

```
alter table employee add constraint emp_NAME unique(fname,lname);
```

```
-----
```

```
CREATE TABLE DEPARTMENT
(
  DEP_ID INTEGER PRIMARY KEY,
  DEP_NAME VARCHAR(100) NOT NULL
);
```

```
CREATE TABLE DESIGNATION
(
  DES_ID INTEGER PRIMARY KEY,
  DES_NAME VARCHAR(100) NOT NULL,
  DEP_ID INTEGER REFERENCES DEPARTMENT
);
```

```
CREATE TABLE medical_services
(
  PATIENT_ID integer not null,
  patient_name varchar(20),
  mobile_no integer,
  address varchar(20),
  sid integer references station(sid) ON DELETE CASCADE ON UPDATE CASCADE,

  CONSTRAINT medical_services_pkey PRIMARY KEY (PATIENT_ID)
);
alter table medical_services add column description varchar(200);
ALTER TABLE medical_services ADD foreign key (SID)
REFERENCES station(SID);
```

```
CREATE TABLE P_email
(
  P_EMAIL VARCHAR(20),
  pid integer references passenger(pid) ON DELETE CASCADE ON UPDATE CASCADE,
  PRIMARY KEY(P_EMAIL)
);
```

```
ALTER TABLE P_email ADD foreign key (pid)
REFERENCES passenger(pid);
```

```
CREATE TABLE e_email
(
  E_EMAIL VARCHAR(20),
  E_id integer references employee(E_ID) ON DELETE CASCADE ON UPDATE CASCADE,
  PRIMARY KEY(e_email)
);
```

```
ALTER TABLE e_email ADD foreign key (E_ID)
REFERENCES employee(E_ID);
```

```
-----  
CREATE TABLE arr_dep_time  
(  
  
  TRAIN_ID varchar(30) references train(train_id) ON DELETE CASCADE ON UPDATE CASCADE,  
  departure_time timestamp,  
  
  arrival_time timestamp,  
  
  sid integer references station(sid) ON DELETE CASCADE ON UPDATE CASCADE,  
);
```