DDL SCRIPT

CREATE SCHEMA WFA;

SET SEARCH_PATH TO WFA;

–ACCOMMODATION

```sql
CREATE TABLE ACCOMMODATION(
        ACCOMMODATION_ID VARCHAR(50),
        ACCOMMODATION_NAME VARCHAR(50) NOT NULL,
        ACCOMMODATION_TYPE VARCHAR(50) NOT NULL,
        STREET VARCHAR(50),
        LANDMARK VARCHAR(50),
        CITY VARCHAR(50),
        STATE VARCHAR(50),
        PINCODE INT NOT NULL,
        CHECK_IN_TIME TIME NOT NULL,
        CHECK_OUT_TIME TIME NOT NULL,
        USER_RATING SMALLINT,
        STAR_CATEGORY SMALLINT,
        STARTING_PRICE INT,

        PRIMARY KEY(ACCOMMODATION_ID)
);

CREATE TABLE ROOM_TYPE(
        ACCOMMODATION_ID VARCHAR(50),
        ROOM_TYPE_ID INT,
        ROOM_TYPE_NAME VARCHAR(50) NOT NULL,
        CAPACITY SMALLINT NOT NULL,
        BED_TYPE VARCHAR(50),
        AREA SMALLINT,
        EXTRA_CAPACITY SMALLINT,
        TOTAL_ROOMS SMALLINT NOT NULL,

        PRIMARY KEY (ROOM_TYPE_ID, ACCOMMODATION_ID),
        FOREIGN KEY (ACCOMMODATION_ID) REFERENCES ACCOMMODATION(ACCOMMODATION_ID)
        );


CREATE TABLE AVAILABLE_ROOMS(
        ACCOMMODATION_ID VARCHAR(50),
        ROOM_TYPE_ID INT,
        CHECK_IN_DATE DATE,
        CHECK_OUT_DATE DATE,
        AVAILABLE_ROOMS SMALLINT,

        PRIMARY KEY(ACCOMMODATION_ID,ROOM_TYPE_ID, CHECK_IN_DATE, CHECK_OUT_DATE),
```

```sql
        FOREIGN KEY(ACCOMMODATION_ID,ROOM_TYPE_ID) REFERENCES
ROOM_TYPE(ACCOMMODATION_ID,ROOM_TYPE_ID)

);


CREATE TABLE ACCOMMODATION_FARES(
        ACCOMMODATION_ID VARCHAR(50),
        ROOM_TYPE_ID INT,
        BASE_PRICE INT NOT NULL,
        MATTRESSES SMALLINT NOT NULL,
        BREAKFAST INT NOT NULL,
        LUNCH_OR_DINNER INT NOT NULL,
        LUNCH_AND_DINNER INT NOT NULL,
        ZERO_CANCELLATION INT NOT NULL,
        TAXES INT NOT NULL,

        PRIMARY KEY (ACCOMMODATION_ID,ROOM_TYPE_ID),
        FOREIGN KEY (ACCOMMODATION_ID,ROOM_TYPE_ID) REFERENCES
ROOM_TYPE(ACCOMMODATION_ID,ROOM_TYPE_ID)

);


CREATE TABLE ACCOMMODATION_REFUND_RULES(
        ACCOMMODATION_ID VARCHAR(50),
        ROOM_TYPE_ID INT,
        GRACE_PERIOD SMALLINT,
        CANCELLATION_PENALTY INT,

        PRIMARY KEY(ACCOMMODATION_ID,ROOM_TYPE_ID,GRACE_PERIOD),
        FOREIGN KEY(ACCOMMODATION_ID,ROOM_TYPE_ID) REFERENCES
ROOM_TYPE(ACCOMMODATION_ID,ROOM_TYPE_ID)

);




--TRANSPORTATION

CREATE TABLE TRANSPORTATION_OWNER(
        TRANSPORTATION_OWNER_ID SMALLINT,
        TRANSPORTATION_OWNER_NAME VARCHAR(50),
        TRANSPORTATION_TYPE VARCHAR(50),

        PRIMARY KEY (TRANSPORTATION_OWNER_ID ,TRANSPORTATION_TYPE)
);
```

```sql
CREATE TABLE STATION(
       STATION_CODE VARCHAR(50),
       STATION_NAME VARCHAR(50),
       CITY VARCHAR(50),
       TRANSPORTATION_TYPE VARCHAR(50),

       PRIMARY KEY (STATION_CODE)
);


CREATE TABLE CLASSES(
       CLASS_ID SMALLINT,
       CLASS_NAME VARCHAR(50),
       TRANSPORTATION_TYPE VARCHAR(50),

       PRIMARY KEY(CLASS_ID)
);


CREATE TABLE TRANSPORTATION(
       TRANSPORTATION_ID VARCHAR(50),
       SOURCE_CODE VARCHAR(50) NOT NULL,
       DESTINATION_CODE VARCHAR(50) NOT NULL,
       DEPARTURE TIME NOT NULL,
       ARRIVAL TIME NOT NULL,
       TRANSPORTATION_NAME VARCHAR(50),
       TRANSPORTATION_TYPE VARCHAR(50),
       TRANSPORTATION_OWNER_ID SMALLINT,
       USER_RATING SMALLINT,
       NO_OF_DAYS SMALLINT,
       PRIMARY KEY(TRANSPORTATION_ID),

       FOREIGN KEY(TRANSPORTATION_TYPE,TRANSPORTATION_OWNER_ID) REFERENCES
TRANSPORTATION_OWNER (TRANSPORTATION_TYPE,TRANSPORTATION_OWNER_ID),
       FOREIGN KEY(SOURCE_CODE) REFERENCES STATION(STATION_CODE),
       FOREIGN KEY(DESTINATION_CODE) REFERENCES STATION(STATION_CODE)
);




CREATE TABLE TRANSPORTATION_CLASS(
       TRANSPORTATION_ID VARCHAR(50),
       CLASS_ID SMALLINT,
       TOTAL_SEATS SMALLINT,
       HAND_LUGGAGE SMALLINT,
       CHECK_IN_LUGGAGE SMALLINT,

       PRIMARY KEY(TRANSPORTATION_ID, CLASS_ID),

       FOREIGN KEY(CLASS_ID) REFERENCES CLASSES(CLASS_ID),
       FOREIGN KEY(TRANSPORTATION_ID) REFERENCES TRANSPORTATION(TRANSPORTATION_ID)
);
```

```sql
CREATE TABLE ROUTE (
        STATION_CODE VARCHAR(50),
        TRANSPORTATION_ID VARCHAR(50),
        STOP_NUMBER SMALLINT NOT NULL,
        ARRIVAL TIME,
        DEPARTURE TIME,
        HALT TIME,
        KM_FROM_ORIGIN SMALLINT NOT NULL,
        DAY_NO SMALLINT  NOT NULL,

        PRIMARY KEY(STATION_CODE, TRANSPORTATION_ID),

        FOREIGN KEY (STATION_CODE) REFERENCES STATION(STATION_CODE),
        FOREIGN KEY (TRANSPORTATION_ID) REFERENCES TRANSPORTATION(TRANSPORTATION_ID)

);


CREATE TABLE AVAILABLE_SEATS(
        TRANSPORTATION_ID VARCHAR(50),
        CLASS_ID SMALLINT,
        FROM_STATION VARCHAR(50),
        TO_STATION VARCHAR(50),
        DEPARTURE_TIMESTAMP TIMESTAMP,
        ARRIVAL_TIMESTAMP TIMESTAMP,
        AVAILABLE_SEATS SMALLINT,

        PRIMARY KEY(TRANSPORTATION_ID, CLASS_ID, JOURNEY_DEPARTURESTAMP,
DEPARTURE_TIMESTAMP),
        FOREIGN KEY (TRANSPORTATION_ID, CLASS_ID) REFERENCES
TRANSPORTATION_CLASS(TRANSPORTATION_ID, CLASS_ID)
);


CREATE TABLE TRANSPORTATION_FARES(
        TRANSPORTATION_ID VARCHAR(50),
        CLASS_ID SMALLINT,
        BASE_PRICE FLOAT(4) NOT NULL,
        BREAKFAST INT ,
        LUNCH INT ,
        DINNER INT ,
        ZERO_CANCELLATION INT ,
        TAXES FLOAT(4) NOT NULL,

        PRIMARY KEY (TRANSPORTATION_ID, CLASS_ID),
        FOREIGN KEY (TRANSPORTATION_ID, CLASS_ID) REFERENCES
TRANSPORTATION_CLASS(TRANSPORTATION_ID, CLASS_ID)
);

CREATE TABLE TRANSPORTATION_REFUND_RULES(
        TRANSPORTATION_ID VARCHAR(50),
        CLASS_ID SMALLINT,
        GRACE_PERIOD SMALLINT NOT NULL,
        CANCELLATION_PENALTY INT NOT NULL,
```

```sql
        PRIMARY KEY(TRANSPORTATION_ID, CLASS_ID, GRACE_PERIOD),
        FOREIGN KEY (TRANSPORTATION_ID, CLASS_ID) REFERENCES
TRANSPORTATION_CLASS(TRANSPORTATION_ID, CLASS_ID)

);

--PACKAGE
CREATE TABLE PACKAGE(
        PACKAGE_ID SMALLINT,
        PACKAGE_NAME VARCHAR(50),
        STARTING_PRICE INT,

        PRIMARY KEY (PACKAGE_ID)
);

CREATE TABLE OFFERS(
        OFFER_ID SMALLINT,
        PACKAGE_ID SMALLINT,
        OFFER_NAME VARCHAR(50),
        START_CITY VARCHAR(50),
        NO_OF_DAYS SMALLINT,
        NO_OF_NIGHTS SMALLINT,
        NO_OF_ACCOMMODATIONS SMALLINT,
        NO_OF_TRANSPORTATIONS SMALLINT,
        PRICE INT,

        PRIMARY KEY (OFFER_ID,PACKAGE_ID),
        FOREIGN KEY (PACKAGE_ID) REFERENCES PACKAGE (PACKAGE_ID)
);

CREATE TABLE OFFER_CITIES(
        OFFER_ID SMALLINT,
        PACKAGE_ID SMALLINT,
        DAY_NO SMALLINT,
        CITY VARCHAR(50),
        NIGHT_STAY VARCHAR(50),

        PRIMARY KEY (OFFER_ID,PACKAGE_ID, DAY_NO, CITY),
        FOREIGN KEY (OFFER_ID, PACKAGE_ID) REFERENCES OFFERS (OFFER_ID, PACKAGE_ID)

);


CREATE TABLE OFFER_DATES(
        OFFER_ID SMALLINT,
        PACKAGE_ID SMALLINT,
        DATE_FROM DATE,
        DATE_TO DATE,

        PRIMARY KEY (OFFER_ID,PACKAGE_ID , DATE_FROM, DATE_TO),
        FOREIGN KEY (OFFER_ID, PACKAGE_ID) REFERENCES OFFERS (OFFER_ID, PACKAGE_ID)
);
```

```sql
CREATE TABLE OFFER_ACCOMMODATION(
      OFFER_ID SMALLINT,
      PACKAGE_ID SMALLINT,
      DAY_NO SMALLINT,
      ACCOMMODATION_ID VARCHAR(50),
      CHECK_IN_DATE DATE,
      CHECK_OUT_DATE DATE,
      ROOM_TYPE_ID INT,

      PRIMARY KEY (OFFER_ID, PACKAGE_ID ACCOMMODATION_ID,CHECK_IN_DATE ,
CHECK_OUT_DATE),
      FOREIGN KEY (OFFER_ID, PACKAGE_ID) REFERENCES OFFERS (OFFER_ID, PACKAGE_ID),
      FOREIGN KEY (ACCOMMODATION_ID, ROOM_TYPE_ID) REFERENCES
ROOM_TYPE(ACCOMMODATION_ID, ROOM_TYPE_ID)

);


CREATE TABLE OFFER_TRANSPORTATION(
      OFFER_ID SMALLINT,
      PACKAGE_ID SMALLINT,
      TRANSPORTATION_ID VARCHAR(50),
      FROM_STATION VARCHAR(50),
      TO_STATION VARCHAR(50),
      DEPARTURE_TIMESTAMP TIMESTAMP,
      ARRIVAL_TIMESTAMP TIMESTAMP,
      CLASS_ID SMALLINT,

      PRIMARY KEY (OFFER_ID, PACKAGE_IDTRANSPORTATION_ID,ARRIVAL_TIMESTAMP,
DEPARTURE_TIMESTAMP),

      FOREIGN KEY (OFFER_ID, PACKAGE_ID) REFERENCES OFFERS (OFFER_ID, PACKAGE_ID),
      FOREIGN KEY (TRANSPORTATION_ID, CLASS_ID) REFERENCES
TRANSPORTATION_CLASS(TRANSPORTATION_ID, CLASS_ID),
      FOREIGN KEY(FROM_STATION) REFERENCES STATION(STATION_CODE),
      FOREIGN KEY(TO_STATION) REFERENCES STATION(STATION_CODE),

);

CREATE TABLE OFFER_FARES (
      OFFER_ID SMALLINT,
      PACKAGE_ID SMALLINT,
      BASE_PRICE INT,
      CHILD_DISCOUNT INT,
      TOTAL_FOOD_AMT INT,
      TOTAL_ZERO_CANCELLATION INT,
      TOTAL_TAXES INT,

      PRIMARY KEY(OFFER_ID ,PACKAGE_ID ),
      FOREIGN KEY(OFFER_ID ,PACKAGE_ID) REFERENCES OFFERS(OFFER_ID ,PACKAGE_ID)

);
```

–CONSUMER

```sql
CREATE TABLE CONSUMER(
      CONSUMER_ID INT,
      USERNAME VARCHAR(50) NOT NULL,
      PASSWORD VARCHAR(50) NOT NULL,
      PREV_PASSWORD VARCHAR(50),

      PRIMARY KEY(CONSUMER_ID)
);

CREATE TABLE CONSUMER_PROFILE(
      CONSUMER_ID INT,
      FIRST_NAME VARCHAR(50) NOT NULL,
      LAST_NAME VARCHAR(50) NOT NULL,
      EMAIL_ID VARCHAR(50) NOT NULL,
      MOBILE_NO VARCHAR(50),
      DOB DATE NOT NULL,
      AGE SMALLINT NOT NULL,
      GENDER VARCHAR(50) NOT NULL,
      CITY VARCHAR(50),
      RATING SMALLINT,

      PRIMARY KEY(CONSUMER_ID),
      FOREIGN KEY (CONSUMER_ID) REFERENCES CONSUMER(CONSUMER_ID)
);

CREATE TABLE BANK_DETAILS(
      ACCOUNT_NO BIGINT,
      CONSUMER_ID INT,
      ACCOUNT_HOLDER_NAME VARCHAR(50) NOT NULL,
      IFSC_CODE VARCHAR(50),
      UPI_ID VARCHAR(50),
      CREDIT_CARD_NO BIGINT,
      DEBIT_CARD_NO BIGINT,

      PRIMARY KEY(ACCOUNT_NO, CONSUMER_ID),
      FOREIGN KEY (CONSUMER_ID) REFERENCES CONSUMER(CONSUMER_ID)
);


–Booking

CREATE TABLE INVOICE_DETAILS(
      INVOICE_ID VARCHAR(50),
      TOTAL AMOUNT INT,
      TAXES INT,
      CATEGORY_DISCOUNT INT,
      GRAND_TOTAL INT,
      TOTAL_AMOUNT_PAID INT,
      AMOUNT_LEFT INT,
      NEXT_INSTALLMENT DATE,
```

```
        PRIMARY KEY(INVOICE_ID)
);

CREATE TABLE BOOKING (
        BOOKING_ID INT,
        FACILITY_TYPE VARCHAR(50),
        CONSUMER_ID INT,
        INVOICE_ID VARCHAR(50),
        BOOKING_DATE DATE,
        NO_OF_TRAVELLERS SMALLINT,
        PRIMARY KEY(BOOKING_ID),
        FOREIGN KEY(CONSUMER_ID) REFERENCES CONSUMER(CONSUMER_ID),
        FOREIGN KEY(INVOICE_ID) REFERENCES INVOICE_DETAILS(INVOICE_ID)

);


CREATE TABLE TRANSACTION(
        TRANSACTION_ID VARCHAR(50),
        INVOICE_ID VARCHAR(10),
        TRANSACTION_MODE VARCHAR(50),
        AMOUNT INT,
        TRANSACTION_TIMESTAMP TIMESTAMP,

        PRIMARY KEY(TRANSACTION_ID),
        FOREIGN KEY(INVOICE_ID) REFERENCES INVOICE_DETAILS(INVOICE_ID)
);

CREATE TABLE ACCOMMODATION_BOOKING(
        BOOKING_ID INT,
        ROOM_TYPE_ID INT,
        ACCOMMODATION_ID VARCHAR(50),
        CHECK_IN_DATE DATE,
        CHECK_OUT_DATE DATE,
        NO_OF_ROOMS SMALLINT,
        NO_OF_NIGHTS SMALLINT,
        BOOKING_STATUS VARCHAR(50),

        PRIMARY KEY(BOOKING_ID),
        FOREIGN KEY(BOOKING_ID) REFERENCES BOOKING(BOOKING_ID),
        FOREIGN KEY(ACCOMMODATION_ID,ROOM_TYPE_ID) REFERENCES
ROOM_TYPE(ACCOMMODATION_ID,ROOM_TYPE_ID)
);

CREATE TABLE ACCOMMODATION_ADD_ON(
        BOOKING_ID INT,
        BREAKFAST BIT,
        LUNCH_OR_DINNER BIT,
        DINNER BIT,
        NO_OF_MATTRESSES SMALLINT,
        ZERO_CANCELLATION BIT,

        PRIMARY KEY(BOOKING_ID),
        FOREIGN KEY(BOOKING_ID) REFERENCES ACCOMMODATION_BOOKING(BOOKING_ID)
```

```sql
);

CREATE TABLE TRANSPORTATION_BOOKING(
        BOOKING_ID INT,
        TRANSPORTATION_ID VARCHAR(50),
        CLASS_ID SMALLINT,
        FROM_STATION VARCHAR(50),
        FROM_STATION VARCHAR(50),
        TO_STATION VARCHAR(50),
        DEPARTURE_TIMESTAMP TIMESTAMP,
        ARRIVAL_TIMESTAMP TIMESTAMP,
        PNR INT,
        BOOKING_STATUS VARCHAR(50),

        PRIMARY KEY(BOOKING_ID),
        FOREIGN KEY(BOOKING_ID) REFERENCES BOOKING(BOOKING_ID),
        FOREIGN KEY(TRANSPORTATION_ID, CLASS_ID) REFERENCES
TRANSPORTATION_CLASS(TRANSPORTATION_ID, CLASS_ID)
        FOREIGN KEY(FROM_STATION) REFERENCES STATION(STATION_CODE),
        FOREIGN KEY(TO_STATION) REFERENCES STATION(STATION_CODE)
);


CREATE TABLE TRANSPORTATION_ADD_ON(
        BOOKING_ID INT,
        BREAKFAST BIT,
        LUNCH BIT,
        DINNER BIT,
        ZERO_CANCELLATION BIT,

        PRIMARY KEY(BOOKING_ID),
        FOREIGN KEY(BOOKING_ID) REFERENCES TRANSPORTATION_BOOKING (BOOKING_ID)
);

CREATE TABLE SEATS(
        BOOKING_ID INT,
        SEAT_NUMBER SMALLINT,

        PRIMARY KEY(BOOKING_ID,SEAT_NUMBER),
        FOREIGN KEY(BOOKING_ID) REFERENCES TRANSPORTATION_BOOKING(BOOKING_ID)
);

CREATE TABLE PACKAGE_BOOKING(
        BOOKING_ID INT,
        PACKAGE_ID SMALLINT,
        OFFER_ID SMALLINT,
        DATE_FROM DATE,
        DATE_TO DATE,


        PRIMARY KEY(BOOKING_ID),
        FOREIGN KEY(PACKAGE_ID, OFFER_ID, DATE_FROM, DATE_TO) REFERENCES
OFFER_DATES(PACKAGE_ID, OFFER_ID, DATE_FROM, DATE_TO)
);
```

```
CREATE TABLE PACKAGE_BOOKING_DETAILS(
        PACKAGE_BOOKING_ID INT,
        BACKEND_BOOKING_ID INT,
        FACILITY_TYPE VARCHAR(50),

        PRIMARY KEY(PACKAGE_BOOKING_ID, BACKEND_BOOKING_ID ),
        FOREIGN KEY(PACKAGE_BOOKING_ID) REFERENCES PACKAGE_BOOKING(BOOKING_ID),
        FOREIGN KEY(BACKEND_BOOKING_ID) REFERENCES BOOKING(BOOKING_ID)
);

CREATE TABLE TRAVELLERS(
        TRAVELLER_ID INT,
        BOOKING_ID INT,
        FIRST_NAME VARCHAR(50) NOT NULL,
        LAST_NAME VARCHAR(50) NOT NULL,
        AGE SMALLINT NOT NULL,
        GENDER VARCHAR(50) NOT NULL,


        PRIMARY_KEY(TRAVELLER_ID),
        FOREIGN KEY (BOOKING_ID) REFERENCES BOOKING(BOOKING_ID)
);

CREATE TABLE CANCELLATION(
        CANCELLATION_ID INT,
        BOOKING_ID INT,
        CANCELLATION_DATE DATE,
        CANCELLATION_CHARGE INT,
        TOTAL_REFUNDABLE_AMOUNT INT,
        REFUND_STATUS VARCHAR(50),

        PRIMARY KEY(CANCELLATION_ID,BOOKING_ID),
        FOREIGN KEY(BOOKING_ID) REFERENCES BOOKING(BOOKING_ID)
);
```