Oracle APEX

TR\_A805\_SQL\_S53.TRAIN\_SEAT

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | Data Type | Nullable | Default | Primary Key |
| SEAT\_ID | NUMBER | No |  | 1 |
| TRAIN\_ID | CHAR(2) | No |  |  |
| COACH\_ID | NUMBER | No |  |  |

CREATE TABLE "TRAIN\_SEAT"

( "SEAT\_ID" NUMBER(\*,0) NOT NULL ENABLE,

"TRAIN\_ID" CHAR(2) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"COACH\_ID" NUMBER(\*,0) NOT NULL ENABLE,

PRIMARY KEY ("SEAT\_ID")

USING INDEX ENABLE

) DEFAULT COLLATION "USING\_NLS\_COMP"

/

ALTER TABLE "TRAIN\_SEAT" ADD CONSTRAINT "FK\_TRAIN\_SEAT\_COACH\_ID" FOREIGN KEY ("COACH\_ID")

REFERENCES "COACH" ("COACH\_ID") ENABLE

/

ALTER TABLE "TRAIN\_SEAT" ADD CONSTRAINT "FK\_TRAIN\_SEAT\_TRAIN\_ID" FOREIGN KEY ("TRAIN\_ID")

REFERENCES "TRAIN" ("TRAIN\_ID") ENABLE

/

Oracle APEX

TR\_A805\_SQL\_S53.TRAIN\_SCHEDULE

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | Data Type | Nullable | Default | Primary Key |
| SEQUENCE\_NO | CHAR(6) | No |  | 1 |
| TRAIN\_ID | CHAR(2) | No |  |  |
| STATION\_ID\_OUT | CHAR(1) | No |  |  |
| TIME\_OUT | CHAR(5) | No |  |  |
| STATION\_ID\_IN | CHAR(1) | No |  |  |
| TIME\_IN | CHAR(5) | No |  |  |

CREATE TABLE "TRAIN\_SCHEDULE"

( "SEQUENCE\_NO" CHAR(6) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"TRAIN\_ID" CHAR(2) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"STATION\_ID\_OUT" CHAR(1) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"TIME\_OUT" CHAR(5) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"STATION\_ID\_IN" CHAR(1) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"TIME\_IN" CHAR(5) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

CONSTRAINT "PK\_TRAIN\_SCHEDULE" PRIMARY KEY ("SEQUENCE\_NO")

USING INDEX ENABLE

) DEFAULT COLLATION "USING\_NLS\_COMP"

/

ALTER TABLE "TRAIN\_SCHEDULE" ADD CONSTRAINT "FK\_TRAIN\_SCHEDULE\_STATION\_ID\_IN" FOREIGN KEY ("STATION\_ID\_IN")

REFERENCES "STATION" ("STATION\_ID") ENABLE

/

ALTER TABLE "TRAIN\_SCHEDULE" ADD CONSTRAINT "FK\_TRAIN\_SCHEDULE\_STATION\_ID\_OUT" FOREIGN KEY ("STATION\_ID\_OUT")

REFERENCES "STATION" ("STATION\_ID") ENABLE

/

ALTER TABLE "TRAIN\_SCHEDULE" ADD CONSTRAINT "FK\_TRAIN\_SCHEDULE\_TRAIN\_ID" FOREIGN KEY ("TRAIN\_ID")

REFERENCES "TRAIN" ("TRAIN\_ID") ENABLE

/

Oracle APEX

TR\_A805\_SQL\_S53.TRAIN

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | Data Type | Nullable | Default | Primary Key |
| TRAIN\_ID | CHAR(2) | No |  | 1 |
| TRAIN\_NAME | VARCHAR2(50) | No |  |  |

CREATE TABLE "TRAIN"

( "TRAIN\_ID" CHAR(2) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"TRAIN\_NAME" VARCHAR2(50) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

PRIMARY KEY ("TRAIN\_ID")

USING INDEX ENABLE

) DEFAULT COLLATION "USING\_NLS\_COMP"

/

Oracle APEX

TR\_A805\_SQL\_S53.TRACK

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | Data Type | Nullable | Default | Primary Key |
| TRACK\_ID | NUMBER | No |  | 1 |
| TRACK\_NAME | VARCHAR2(50) | No |  |  |
| STATION\_FROM\_ID | CHAR(1) | No |  |  |
| STATION\_TO\_ID | CHAR(1) | No |  |  |

CREATE TABLE "TRACK"

( "TRACK\_ID" NUMBER(\*,0) NOT NULL ENABLE,

"TRACK\_NAME" VARCHAR2(50) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"STATION\_FROM\_ID" CHAR(1) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"STATION\_TO\_ID" CHAR(1) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

PRIMARY KEY ("TRACK\_ID")

USING INDEX ENABLE

) DEFAULT COLLATION "USING\_NLS\_COMP"

/

ALTER TABLE "TRACK" ADD CONSTRAINT "FK\_TRACK\_STATION\_FROM\_ID" FOREIGN KEY ("STATION\_FROM\_ID")

REFERENCES "STATION" ("STATION\_ID") ENABLE

/

ALTER TABLE "TRACK" ADD CONSTRAINT "FK\_TRACK\_STATION\_TO\_ID" FOREIGN KEY ("STATION\_TO\_ID")

REFERENCES "STATION" ("STATION\_ID") ENABLE

/

Oracle APEX

TR\_A805\_SQL\_S53.STATION

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | Data Type | Nullable | Default | Primary Key |
| STATION\_ID | CHAR(1) | No |  | 1 |
| STATION\_NAME | VARCHAR2(50) | No |  |  |

CREATE TABLE "STATION"

( "STATION\_ID" CHAR(1) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"STATION\_NAME" VARCHAR2(50) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

PRIMARY KEY ("STATION\_ID")

USING INDEX ENABLE

) DEFAULT COLLATION "USING\_NLS\_COMP"

/

Oracle APEX

TR\_A805\_SQL\_S53.PASSENGER\_BOOKING

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | Data Type | Nullable | Default | Primary Key |
| TICKET\_ID | CHAR(8) | No |  | 1 |
| PASSENGER\_ID | CHAR(4) | No |  |  |
| BOOKING\_DATE | DATE | No |  |  |
| TRAIN\_ID | CHAR(2) | No |  |  |
| PSG\_COACH\_ID | NUMBER | No |  |  |
| SEAT\_ID | NUMBER | No |  |  |
| START\_STATION\_ID | CHAR(1) | No |  |  |
| STOP\_STATION\_ID | CHAR(1) | No |  |  |

CREATE TABLE "PASSENGER\_BOOKING"

( "PASSENGER\_ID" CHAR(4) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"TICKET\_ID" CHAR(8) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"BOOKING\_DATE" DATE NOT NULL ENABLE,

"TRAIN\_ID" CHAR(2) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"PSG\_COACH\_ID" NUMBER(\*,0) NOT NULL ENABLE,

"SEAT\_ID" NUMBER(\*,0) NOT NULL ENABLE,

"START\_STATION\_ID" CHAR(1) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"STOP\_STATION\_ID" CHAR(1) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

CONSTRAINT "PK\_PASSENGER\_BOOKING" PRIMARY KEY ("TICKET\_ID")

USING INDEX ENABLE

) DEFAULT COLLATION "USING\_NLS\_COMP"

/

ALTER TABLE "PASSENGER\_BOOKING" ADD CONSTRAINT "FK\_PASSENGER\_BOOKING\_PASSENGER\_ID" FOREIGN KEY ("PASSENGER\_ID")

REFERENCES "PASSENGER" ("PASSENGER\_ID") ENABLE

/

ALTER TABLE "PASSENGER\_BOOKING" ADD CONSTRAINT "FK\_PASSENGER\_BOOKING\_PSG\_COACH\_ID" FOREIGN KEY ("PSG\_COACH\_ID")

REFERENCES "COACH" ("COACH\_ID") ENABLE

/

ALTER TABLE "PASSENGER\_BOOKING" ADD CONSTRAINT "FK\_PASSENGER\_BOOKING\_SEAT\_ID" FOREIGN KEY ("SEAT\_ID")

REFERENCES "TRAIN\_SEAT" ("SEAT\_ID") ENABLE

/

ALTER TABLE "PASSENGER\_BOOKING" ADD CONSTRAINT "FK\_PASSENGER\_BOOKING\_START\_STATION\_ID" FOREIGN KEY ("START\_STATION\_ID")

REFERENCES "STATION" ("STATION\_ID") ENABLE

/

ALTER TABLE "PASSENGER\_BOOKING" ADD CONSTRAINT "FK\_PASSENGER\_BOOKING\_STOP\_STATION\_ID" FOREIGN KEY ("STOP\_STATION\_ID")

REFERENCES "STATION" ("STATION\_ID") ENABLE

/

ALTER TABLE "PASSENGER\_BOOKING" ADD CONSTRAINT "FK\_PASSENGER\_BOOKING\_TRAIN\_ID" FOREIGN KEY ("TRAIN\_ID")

REFERENCES "TRAIN" ("TRAIN\_ID") ENABLE

/

CREATE OR REPLACE EDITIONABLE TRIGGER "PREVENTPASSENGERIDCHANGE"

BEFORE UPDATE ON PASSENGER\_BOOKING

FOR EACH ROW

BEGIN

IF :NEW.Passenger\_ID != :OLD.Passenger\_ID THEN

RAISE\_APPLICATION\_ERROR(-20001, 'Cannot change the PassengerID of a booking');

END IF;

END;

/

ALTER TRIGGER "PREVENTPASSENGERIDCHANGE" ENABLE

/

Oracle APEX

TR\_A805\_SQL\_S53.PASSENGER

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | Data Type | Nullable | Default | Primary Key |
| PASSENGER\_ID | CHAR(4) | No |  | 1 |
| FULLNAME | VARCHAR2(50) | No |  |  |
| LASTNAME | VARCHAR2(50) | No |  |  |
| GENDER | VARCHAR2(50) | No |  |  |

CREATE TABLE "PASSENGER"

( "PASSENGER\_ID" CHAR(4) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"FULLNAME" VARCHAR2(50) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"LASTNAME" VARCHAR2(50) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

"GENDER" VARCHAR2(50) COLLATE "USING\_NLS\_COMP" NOT NULL ENABLE,

PRIMARY KEY ("PASSENGER\_ID")

USING INDEX ENABLE

) DEFAULT COLLATION "USING\_NLS\_COMP"

/

Oracle APEX

TR\_A805\_SQL\_S53.COACH

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Column Name | Data Type | Nullable | Default | Primary Key |
| COACH\_ID | NUMBER | No |  | 1 |
| CAPABILITY | NUMBER | Yes |  |  |
| TRAIN\_ID | CHAR(2) | Yes |  |  |
| SNACK | VARCHAR2(50) | Yes |  |  |
| FOOD | VARCHAR2(50) | Yes |  |  |
| MUSIC | VARCHAR2(50) | Yes |  |  |
| DRINK | VARCHAR2(50) | Yes |  |  |

CREATE TABLE "COACH"

( "COACH\_ID" NUMBER(\*,0),

"CAPABILITY" NUMBER(\*,0),

"TRAIN\_ID" CHAR(2) COLLATE "USING\_NLS\_COMP",

"SNACK" VARCHAR2(50) COLLATE "USING\_NLS\_COMP",

"FOOD" VARCHAR2(50) COLLATE "USING\_NLS\_COMP",

"MUSIC" VARCHAR2(50) COLLATE "USING\_NLS\_COMP",

"DRINK" VARCHAR2(50) COLLATE "USING\_NLS\_COMP",

PRIMARY KEY ("COACH\_ID")

USING INDEX ENABLE

) DEFAULT COLLATION "USING\_NLS\_COMP"

/

ALTER TABLE "COACH" ADD CONSTRAINT "FK\_COACH\_TRAIN\_ID" FOREIGN KEY ("TRAIN\_ID")

REFERENCES "TRAIN" ("TRAIN\_ID") ENABLE

/