-- MySQL Workbench Forward Engineering

SET @OLD\_UNIQUE\_CHECKS=@@UNIQUE\_CHECKS, UNIQUE\_CHECKS=0;

SET @OLD\_FOREIGN\_KEY\_CHECKS=@@FOREIGN\_KEY\_CHECKS, FOREIGN\_KEY\_CHECKS=0;

SET @OLD\_SQL\_MODE=@@SQL\_MODE, SQL\_MODE='ONLY\_FULL\_GROUP\_BY,STRICT\_TRANS\_TABLES,NO\_ZERO\_IN\_DATE,NO\_ZERO\_DATE,ERROR\_FOR\_DIVISION\_BY\_ZERO,NO\_ENGINE\_SUBSTITUTION';

-- -----------------------------------------------------

-- Schema project

-- -----------------------------------------------------

-- -----------------------------------------------------

-- Schema project

-- -----------------------------------------------------

CREATE SCHEMA IF NOT EXISTS `project` DEFAULT CHARACTER SET utf8 ;

USE `project` ;

-- -----------------------------------------------------

-- Table `project`.`AIRPORT`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`AIRPORT` (

`Airport\_code` INT NOT NULL,

`Name` VARCHAR(20) NOT NULL,

`City` VARCHAR(20) NOT NULL,

`State` VARCHAR(20) NOT NULL,

PRIMARY KEY (`Airport\_code`))

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `project`.`FLIGHT`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`FLIGHT` (

`Flight\_number` INT NOT NULL,

`Airline` VARCHAR(45) NOT NULL,

`Weekdays` DATE NULL,

PRIMARY KEY (`Flight\_number`))

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `project`.`AIRPLANE\_TYPE`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`AIRPLANE\_TYPE` (

`Airplane\_type\_name` VARCHAR(20) NOT NULL,

`Max\_seats` INT NOT NULL,

`Company` VARCHAR(45) NULL,

PRIMARY KEY (`Airplane\_type\_name`))

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `project`.`AIRPLANE`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`AIRPLANE` (

`Airplane\_id` VARCHAR(10) NOT NULL,

`Total\_number\_of\_seats` INT NOT NULL,

`Airplane\_type` VARCHAR(20) NOT NULL,

PRIMARY KEY (`Airplane\_id`),

CONSTRAINT `fk\_AIRPLANE\_AIRPLANE\_TYPE11111`

FOREIGN KEY (`Airplane\_type`)

REFERENCES `project`.`AIRPLANE\_TYPE` (`Airplane\_type\_name`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

CREATE INDEX `fk\_AIRPLANE\_AIRPLANE\_TYPE1\_idxxx` ON `project`.`AIRPLANE` (`Airplane\_type` ASC) VISIBLE;

-- -----------------------------------------------------

-- Table `project`.`FLIGHT\_LEG`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`FLIGHT\_LEG` (

`Flight\_number` INT NOT NULL,

`Leg\_number` INT NOT NULL,

`Departure\_airport\_code` INT NOT NULL,

`Scheduled\_departure\_time` DATETIME NOT NULL,

`Arrival\_airport\_code` INT NOT NULL,

`Scheduled\_arrival\_time` DATETIME NOT NULL,

PRIMARY KEY (`Leg\_number`, `Flight\_number`),

CONSTRAINT `fk\_Flight\_leg\_FLIGHT`

FOREIGN KEY (`Flight\_number`)

REFERENCES `project`.`FLIGHT` (`Flight\_number`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `fk\_Flight\_leg\_AIRPORT1`

FOREIGN KEY (`Departure\_airport\_code`)

REFERENCES `project`.`AIRPORT` (`Airport\_code`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `fk\_Flight\_leg\_AIRPORT2`

FOREIGN KEY (`Arrival\_airport\_code`)

REFERENCES `project`.`AIRPORT` (`Airport\_code`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

CREATE INDEX `fk\_Flight\_leg\_FLIGHT\_idxxx` ON `project`.`FLIGHT\_LEG` (`Flight\_number` ASC) VISIBLE;

CREATE INDEX `fk\_Flight\_leg\_AIRPORT1\_idx` ON `project`.`FLIGHT\_LEG` (`Departure\_airport\_code` ASC) VISIBLE;

CREATE INDEX `fk\_Flight\_leg\_AIRPORT2\_idx` ON `project`.`FLIGHT\_LEG` (`Arrival\_airport\_code` ASC) VISIBLE;

-- -----------------------------------------------------

-- Table `project`.`CAN\_LAND`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`CAN\_LAND` (

`Airplane\_type\_name` VARCHAR(20) NOT NULL,

`Airport\_code` INT NOT NULL,

PRIMARY KEY (`Airplane\_type\_name`, `Airport\_code`),

CONSTRAINT `fk\_CAN\_LAND\_AIRPLANE\_TYPE1`

FOREIGN KEY (`Airplane\_type\_name`)

REFERENCES `project`.`AIRPLANE\_TYPE` (`Airplane\_type\_name`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `fk\_CAN\_LAND\_AIRPORT1`

FOREIGN KEY (`Airport\_code`)

REFERENCES `project`.`AIRPORT` (`Airport\_code`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

CREATE INDEX `fk\_CAN\_LAND\_AIRPORT1\_idx` ON `project`.`CAN\_LAND` (`Airport\_code` ASC) VISIBLE;

-- -----------------------------------------------------

-- Table `project`.`LEG\_INSTANCE`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`LEG\_INSTANCE` (

`Flight\_number` INT NOT NULL,

`Leg\_number` INT NOT NULL,

`Date` DATE NOT NULL,

`Number\_of\_available\_seats` INT NULL,

`Airplane\_id` VARCHAR(10) NULL,

`Departure\_airport\_code` INT NOT NULL,

`Departure\_time` DATETIME NOT NULL,

`Arrival\_airport\_code` INT NOT NULL,

`Arrival\_time` DATETIME NOT NULL,

PRIMARY KEY (`Date`, `Leg\_number`, `Flight\_number`),

CONSTRAINT `fk\_LEG\_INSTANCE\_FLIGHT1`

FOREIGN KEY (`Flight\_number`)

REFERENCES `project`.`FLIGHT` (`Flight\_number`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `fk\_LEG\_INSTANCE\_Flight\_leg1`

FOREIGN KEY (`Leg\_number`)

REFERENCES `project`.`FLIGHT\_LEG` (`Leg\_number`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `fk\_LEG\_INSTANCE\_AIRPLANE1`

FOREIGN KEY (`Airplane\_id`)

REFERENCES `project`.`AIRPLANE` (`Airplane\_id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `fk\_LEG\_INSTANCE\_AIRPORT1`

FOREIGN KEY (`Departure\_airport\_code`)

REFERENCES `project`.`AIRPORT` (`Airport\_code`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `fk\_LEG\_INSTANCE\_AIRPORT2`

FOREIGN KEY (`Arrival\_airport\_code`)

REFERENCES `project`.`AIRPORT` (`Airport\_code`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

CREATE INDEX `fk\_LEG\_INSTANCE\_Flight\_leg1\_idx` ON `project`.`LEG\_INSTANCE` (`Leg\_number` ASC) VISIBLE;

CREATE INDEX `fk\_LEG\_INSTANCE\_AIRPLANE1\_idx` ON `project`.`LEG\_INSTANCE` (`Airplane\_id` ASC) VISIBLE;

CREATE INDEX `fk\_LEG\_INSTANCE\_AIRPORT1\_idx` ON `project`.`LEG\_INSTANCE` (`Departure\_airport\_code` ASC) VISIBLE;

CREATE INDEX `fk\_LEG\_INSTANCE\_AIRPORT2\_idx` ON `project`.`LEG\_INSTANCE` (`Arrival\_airport\_code` ASC) VISIBLE;

-- -----------------------------------------------------

-- Table `project`.`SEAT\_RESERVATION`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`SEAT\_RESERVATION` (

`Flight\_number` INT NOT NULL,

`Leg\_number` INT NOT NULL,

`Date` DATE NOT NULL,

`Seat\_number` INT NOT NULL,

`Customer\_name` VARCHAR(20) NOT NULL,

`Customer\_phone` VARCHAR(20) NOT NULL,

PRIMARY KEY (`Flight\_number`, `Leg\_number`, `Date`, `Seat\_number`),

CONSTRAINT `fk\_SEAT\_RESERVATION\_FLIGHT1`

FOREIGN KEY (`Flight\_number`)

REFERENCES `project`.`FLIGHT` (`Flight\_number`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `fk\_SEAT\_RESERVATION\_Flight\_leg1`

FOREIGN KEY (`Leg\_number`)

REFERENCES `project`.`FLIGHT\_LEG` (`Leg\_number`)

ON DELETE NO ACTION

ON UPDATE NO ACTION,

CONSTRAINT `fk\_SEAT\_RESERVATION\_LEG\_INSTANCE1`

FOREIGN KEY (`Date`)

REFERENCES `project`.`LEG\_INSTANCE` (`Date`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

CREATE INDEX `fk\_SEAT\_RESERVATION\_Flight\_leg1\_idx` ON `project`.`SEAT\_RESERVATION` (`Leg\_number` ASC) VISIBLE;

CREATE INDEX `fk\_SEAT\_RESERVATION\_LEG\_INSTANCE1\_idx` ON `project`.`SEAT\_RESERVATION` (`Date` ASC) VISIBLE;

-- -----------------------------------------------------

-- Table `project`.`FARE`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`FARE` (

`Flight\_number` INT NOT NULL,

`Fare\_code` INT NOT NULL,

`Amount` INT NOT NULL,

`Restrictions` VARCHAR(45) NULL,

PRIMARY KEY (`Fare\_code`, `Flight\_number`),

CONSTRAINT `fk\_FARE\_FLIGHT1`

FOREIGN KEY (`Flight\_number`)

REFERENCES `project`.`FLIGHT` (`Flight\_number`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

USE `project` ;

-- -----------------------------------------------------

-- Placeholder table for view `project`.`view\_AIPORT`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`view\_AIPORT` (`Airport\_code` INT, `Name` INT, `City` INT, `State` INT);

-- -----------------------------------------------------

-- Placeholder table for view `project`.`view\_FLIGHT`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`view\_FLIGHT` (`Flight\_number` INT, `Airline` INT, `Weekdays` INT);

-- -----------------------------------------------------

-- Placeholder table for view `project`.`view\_FLIGHT\_LEG`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`view\_FLIGHT\_LEG` (`Flight\_number` INT, `Leg\_number` INT, `Departure\_airport\_code` INT, `Scheduled\_departure\_time` INT, `Arrival\_airport\_code` INT, `Scheduled\_arrival\_time` INT);

-- -----------------------------------------------------

-- Placeholder table for view `project`.`view\_LEG\_INSTANCE`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`view\_LEG\_INSTANCE` (`Flight\_number` INT, `Leg\_number` INT, `Date` INT, `Number\_of\_available\_seats` INT, `Airplane\_id` INT, `Departure\_airport\_code` INT, `Departure\_time` INT, `Arrival\_airport\_code` INT, `Arrival\_time` INT);

-- -----------------------------------------------------

-- Placeholder table for view `project`.`view\_FARE`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`view\_FARE` (`Flight\_number` INT, `Fare\_code` INT, `Amount` INT, `Restrictions` INT);

-- -----------------------------------------------------

-- Placeholder table for view `project`.`view\_AIRPLANE\_TYPE`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`view\_AIRPLANE\_TYPE` (`Airplane\_type\_name` INT, `Max\_seats` INT, `Company` INT);

-- -----------------------------------------------------

-- Placeholder table for view `project`.`view\_CAN\_LAND`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`view\_CAN\_LAND` (`Airplane\_type\_name` INT, `Airport\_code` INT);

-- -----------------------------------------------------

-- Placeholder table for view `project`.`view\_AIRPLANE`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`view\_AIRPLANE` (`Airplane\_id` INT, `Total\_number\_of\_seats` INT, `Airplane\_type` INT);

-- -----------------------------------------------------

-- Placeholder table for view `project`.`view\_SEAT\_RESERVATION`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `project`.`view\_SEAT\_RESERVATION` (`Flight\_number` INT, `Leg\_number` INT, `Date` INT, `Seat\_number` INT, `Customer\_name` INT, `Customer\_phone` INT);

-- -----------------------------------------------------

-- View `project`.`view\_AIPORT`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `project`.`view\_AIPORT`;

USE `project`;

CREATE OR REPLACE VIEW `view\_AIPORT` AS

SELECT \* FROM AIRPORT;

-- -----------------------------------------------------

-- View `project`.`view\_FLIGHT`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `project`.`view\_FLIGHT`;

USE `project`;

CREATE OR REPLACE VIEW `view\_FLIGHT` AS

SELECT \* FROM FLIGHT;

-- -----------------------------------------------------

-- View `project`.`view\_FLIGHT\_LEG`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `project`.`view\_FLIGHT\_LEG`;

USE `project`;

CREATE OR REPLACE VIEW `view\_FLIGHT\_LEG` AS

SELECT \* FROM FLIGHT\_LEG;

-- -----------------------------------------------------

-- View `project`.`view\_LEG\_INSTANCE`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `project`.`view\_LEG\_INSTANCE`;

USE `project`;

CREATE OR REPLACE VIEW `view\_LEG\_INSTANCE` AS

SELECT \* FROM LEG\_INSTANCE;

-- -----------------------------------------------------

-- View `project`.`view\_FARE`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `project`.`view\_FARE`;

USE `project`;

CREATE OR REPLACE VIEW `view\_FARE` AS

SELECT \* FROM FARE;

-- -----------------------------------------------------

-- View `project`.`view\_AIRPLANE\_TYPE`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `project`.`view\_AIRPLANE\_TYPE`;

USE `project`;

CREATE OR REPLACE VIEW `view\_AIRPLANE\_TYPE` AS

SELECT \* FROM AIRPLANE\_TYPE;

-- -----------------------------------------------------

-- View `project`.`view\_CAN\_LAND`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `project`.`view\_CAN\_LAND`;

USE `project`;

CREATE OR REPLACE VIEW `view\_CAN\_LAND` AS

SELECT \* FROM CAN\_LAND;

-- -----------------------------------------------------

-- View `project`.`view\_AIRPLANE`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `project`.`view\_AIRPLANE`;

USE `project`;

CREATE OR REPLACE VIEW `view\_AIRPLANE` AS

SELECT \* FROM AIRPLANE;

-- -----------------------------------------------------

-- View `project`.`view\_SEAT\_RESERVATION`

-- -----------------------------------------------------

DROP TABLE IF EXISTS `project`.`view\_SEAT\_RESERVATION`;

USE `project`;

CREATE OR REPLACE VIEW `view\_SEAT\_RESERVATION` AS

SELECT \* FROM SEAT\_RESERVATION;

SET SQL\_MODE=@OLD\_SQL\_MODE;

SET FOREIGN\_KEY\_CHECKS=@OLD\_FOREIGN\_KEY\_CHECKS;

SET UNIQUE\_CHECKS=@OLD\_UNIQUE\_CHECKS;