



```
DROP TABLE IF EXISTS `reservations`;
```

```
CREATE TABLE `reservations` (
  `rid` int NOT NULL AUTO_INCREMENT,
  `user_id` int DEFAULT NULL,
  `schedule_id` int DEFAULT NULL,
  `origin` int DEFAULT NULL,
  `destination` int DEFAULT NULL,
  `reservation_date` date DEFAULT NULL,
  `fare` float DEFAULT NULL,
  PRIMARY KEY (`rid`),
  KEY `user_id` (`user_id`),
  KEY `schedule_id` (`schedule_id`),
  KEY `origin` (`origin`),
  KEY `destination` (`destination`),
  CONSTRAINT `reservations_ibfk_1` FOREIGN KEY (`user_id`) REFERENCES `users`
  (`user_id`),
  CONSTRAINT `reservations_ibfk_2` FOREIGN KEY (`schedule_id`) REFERENCES
  `schedules` (`scid`),
  CONSTRAINT `reservations_ibfk_3` FOREIGN KEY (`origin`) REFERENCES `stations` (`sid`),
  CONSTRAINT `reservations_ibfk_4` FOREIGN KEY (`destination`) REFERENCES `stations`
  (`sid`)
) ENGINE=InnoDB AUTO_INCREMENT=6 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;
```

```
DROP TABLE IF EXISTS `schedules`;
```

```
CREATE TABLE `schedules` (  
  `scid` int NOT NULL AUTO_INCREMENT,  
  `train` char(4) DEFAULT NULL,  
  `trainline` int DEFAULT NULL,  
  `departure_time` datetime DEFAULT NULL,  
  `arrival_time` datetime DEFAULT NULL,  
  PRIMARY KEY (`scid`),  
  KEY `train` (`train`),  
  KEY `trainline` (`trainline`),  
  CONSTRAINT `schedules_ibfk_1` FOREIGN KEY (`train`) REFERENCES `trains` (`tid`),  
  CONSTRAINT `schedules_ibfk_2` FOREIGN KEY (`trainline`) REFERENCES `trainlines`  
  (`tlid`)  
) ENGINE=InnoDB AUTO_INCREMENT=7 DEFAULT CHARSET=utf8mb4  
COLLATE=utf8mb4_0900_ai_ci;  
DROP TABLE IF EXISTS `stations`;
```

```
CREATE TABLE `stations` (  
  `sid` int NOT NULL AUTO_INCREMENT,  
  `name` varchar(100) NOT NULL,  
  `city` varchar(100) NOT NULL,  
  `state` varchar(50) NOT NULL,  
  PRIMARY KEY (`sid`)  
) ENGINE=InnoDB AUTO_INCREMENT=45 DEFAULT CHARSET=utf8mb4  
COLLATE=utf8mb4_0900_ai_ci;
```

```
DROP TABLE IF EXISTS `stops`;
```

```
CREATE TABLE `stops` (  
  `sid` int NOT NULL,  
  `tlid` int NOT NULL,  
  PRIMARY KEY (`sid`, `tlid`),  
  KEY `tlid` (`tlid`),  
  CONSTRAINT `stops_ibfk_1` FOREIGN KEY (`sid`) REFERENCES `stations` (`sid`),  
  CONSTRAINT `stops_ibfk_2` FOREIGN KEY (`tlid`) REFERENCES `trainlines` (`tlid`)  
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;
```

```
DROP TABLE IF EXISTS `trainlines`;
```

```
CREATE TABLE `trainlines` (  
  `tlid` int NOT NULL AUTO_INCREMENT,  
  `name` varchar(100) NOT NULL,
```

```

`origin` int DEFAULT NULL,
`destination` int DEFAULT NULL,
`travel_time` int DEFAULT NULL,
`total_stops` int DEFAULT NULL,
`fare` float DEFAULT NULL,
PRIMARY KEY (`tlid`),
KEY `origin` (`origin`),
KEY `destination` (`destination`),
CONSTRAINT `trainlines_ibfk_1` FOREIGN KEY (`origin`) REFERENCES `stations` (`sid`),
CONSTRAINT `trainlines_ibfk_2` FOREIGN KEY (`destination`) REFERENCES `stations`
(`sid`)
) ENGINE=InnoDB AUTO_INCREMENT=5 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;
DROP TABLE IF EXISTS `trains`;
CREATE TABLE `trains` (
  `tid` char(4) NOT NULL,
  PRIMARY KEY (`tid`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci;

```

```

DROP TABLE IF EXISTS `users`;

```

```

CREATE TABLE `users` (
  `user_id` int NOT NULL AUTO_INCREMENT,
  `username` varchar(50) DEFAULT NULL,
  `password` varchar(100) NOT NULL,
  `email` varchar(100) NOT NULL,
  `phone` varchar(20) DEFAULT NULL,
  `role` enum('admin','customer','rep') NOT NULL,
  PRIMARY KEY (`user_id`),
  UNIQUE KEY `email` (`email`),
  UNIQUE KEY `username` (`username`),
  UNIQUE KEY `username_2` (`username`)
) ENGINE=InnoDB AUTO_INCREMENT=12 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;

```

```

INSERT INTO Users (username, password, email, phone, role)
VALUES
('rep1', 'Represent1223', 'rep1@example.com', '123-456-7890', 'rep'),
('admin1', 'TrainAdmin1223', 'admin@example.com', '321-654-0987', 'admin'),
('cust1', 'custpass', 'cust1@example.com', '111-222-3333', 'customer');

```