```
CREATE TABLE `business` (
 `Business_ID` int NOT NULL AUTO_INCREMENT,
 `BName` varchar(128) NOT NULL,
 `Website_URL` varchar(300) NOT NULL,
 `Weekday_open_time` varchar(128) NOT NULL,
 `Weekday_close_time` varchar(128) NOT NULL,
 `Weekend_open_time` varchar(128) NOT NULL,
 'Weekend_close_time' varchar(128) NOT NULL,
 `Instagram` varchar(45) DEFAULT NULL,
 `Twitter` varchar(45) DEFAULT NULL,
 `Facebook` varchar(45) DEFAULT NULL,
 'Description' longtext NOT NULL,
 `User_ID` int NOT NULL,
 `Region_ID` int NOT NULL,
 PRIMARY KEY ('Business_ID', 'User_ID', 'Region_ID'),
 UNIQUE KEY 'Business_ID_UNIQUE' ('Business_ID'),
 KEY `User_ID_idx` (`User_ID`),
 KEY 'Region_idx' ('Region_ID'),
 CONSTRAINT `Region` FOREIGN KEY (`Region_ID`), REFERENCES `region` (`Region_ID`),
 CONSTRAINT 'User_ID' FOREIGN KEY ('User_ID') REFERENCES 'user' ('UserID') ON DELETE RESTRICT
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
CREATE TABLE 'bemail' (
 `BusinessID` int NOT NULL,
 'BEmail' varchar(300) NOT NULL,
 PRIMARY KEY ('BusinessID', 'BEmail'),
 CONSTRAINT `BusinessIDemail` FOREIGN KEY (`BusinessID`) REFERENCES `business` (`Business_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

```
CREATE TABLE `bnumber` (
 `BusinessID` int NOT NULL,
 `BNumber` varchar(45) NOT NULL,
 PRIMARY KEY ('BusinessID', 'BNumber'),
 CONSTRAINT `BusinessIDbnum` FOREIGN KEY (`BusinessID`) REFERENCES `business` (`Business_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
CREATE TABLE `business_reviews` (
 `Business_ID` int NOT NULL,
 `User_ID` int NOT NULL,
 'Rating' int NOT NULL,
 'Comment' longtext NOT NULL,
 PRIMARY KEY ('Business_ID', 'User_ID'),
 KEY `UserIDbr_idx` (`User_ID`),
 CONSTRAINT 'BusinessIDbr' FOREIGN KEY ('Business_ID') REFERENCES 'business' ('Business_ID'),
 CONSTRAINT 'UserIDbr' FOREIGN KEY ('User_ID') REFERENCES 'user' ('UserID')
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
CREATE TABLE 'event' (
 `BusinessID` int NOT NULL,
 `EventID` int NOT NULL,
 `Description` longtext NOT NULL,
 'Name' varchar(128) NOT NULL,
 PRIMARY KEY ('BusinessID', 'EventID'),
 CONSTRAINT `BusinessIDother` FOREIGN KEY (`BusinessID`) REFERENCES `business` (`Business_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

```
CREATE TABLE `favourite_business` (
 'UserID' int NOT NULL,
 `BusinessID` int NOT NULL,
 PRIMARY KEY ('UserID', 'BusinessID'),
 KEY `BusinessIDFB_idx` (`BusinessID`),
 CONSTRAINT `BusinessIDFB` FOREIGN KEY (`BusinessID`) REFERENCES `business` (`Business_ID`),
 CONSTRAINT 'UserIDFB' FOREIGN KEY ('UserID') REFERENCES 'user' ('UserID')
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
CREATE TABLE `favourite_wine` (
 'WineID' int NOT NULL,
 'UserID' int NOT NULL,
 PRIMARY KEY ('WineID', 'UserID'),
 KEY `UserID_idx` (`UserID`),
 CONSTRAINT 'UserID' FOREIGN KEY ('UserID') REFERENCES 'user' ('UserID'),
 CONSTRAINT 'WineID' FOREIGN KEY ('WineID') REFERENCES 'wine' ('WineID')
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
CREATE TABLE `lot` (
 `Lot_ID` int NOT NULL AUTO_INCREMENT,
 'WineQuantity' int NOT NULL DEFAULT '0',
 `Business_ID` int NOT NULL,
 PRIMARY KEY ('Lot_ID', 'Business_ID'),
 UNIQUE KEY 'Lot_ID_UNIQUE' ('Lot_ID'),
 KEY `Business_ID_idx` (`Business_ID`),
 CONSTRAINT 'Business_ID' FOREIGN KEY ('Business_ID') REFERENCES 'business' ('Business_ID')
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

```
CREATE TABLE `manager` (
 'UserID' int NOT NULL,
 PRIMARY KEY ('UserID'),
CONSTRAINT `UserIDManager` FOREIGN KEY (`UserID`) REFERENCES `user` (`UserID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
CREATE TABLE 'recommendations' (
 `RecID` int NOT NULL AUTO_INCREMENT,
 'WineID' int NOT NULL,
 `BusinessID` int NOT NULL.
 PRIMARY KEY ('RecID', 'WineID', 'BusinessID'),
 UNIQUE KEY 'RecID_UNIQUE' ('RecID'),
 KEY `WineID_idx` (`WineID`),
 KEY 'BusinessID_idx' ('BusinessID'),
 KEY `WineIDRec_idx` (`WineID`),
 KEY `BusinessIDRec_idx` (`BusinessID`),
CONSTRAINT 'BusinessIDRec' FOREIGN KEY ('BusinessID') REFERENCES 'business' ('Business_ID'),
 CONSTRAINT `WineIDRec` FOREIGN KEY (`WineID`) REFERENCES `wine` (`WineID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
CREATE TABLE `region` (
 `Region_ID` int NOT NULL AUTO_INCREMENT,
 'Country' varchar(45) NOT NULL,
 'RegionName' varchar(45) NOT NULL,
 `Latitude` varchar(45) NOT NULL,
 `Longitude` varchar(45) NOT NULL,
 PRIMARY KEY ('Region_ID'),
 UNIQUE KEY `Region_ID_UNIQUE` (`Region_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

```
CREATE TABLE 'tourist' (
 'UserID' int NOT NULL,
 PRIMARY KEY ('UserID'),
CONSTRAINT `UserIDtourist` FOREIGN KEY (`UserID`) REFERENCES `user` (`UserID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
CREATE TABLE `user` (
 'UserID' int NOT NULL AUTO_INCREMENT,
`First_name` varchar(128) NOT NULL,
 `Middle_name` varchar(128) DEFAULT NULL,
 `Last_name` varchar(128) NOT NULL,
 `Region_id` int NOT NULL,
 'Password' varchar(255) NOT NULL,
 `Salt` varchar(45) NOT NULL,
 `Pepper` varchar(45) NOT NULL,
 `Email` varchar(256) NOT NULL,
 `API_Key` varchar(45) NOT NULL,
 `PhoneNumber` varchar(45) NOT NULL,
 PRIMARY KEY ('UserID', 'Region_id'),
 UNIQUE KEY `UserID_UNIQUE` (`UserID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

```
CREATE TABLE `wine` (
 `WineID` int NOT NULL AUTO_INCREMENT,
 `Image_URL` varchar(300) NOT NULL,
 `Body` varchar(45) NOT NULL,
 `Alcohol` varchar(45) NOT NULL,
 `Tannin` varchar(45) NOT NULL,
 `Acidity` varchar(45) NOT NULL,
 'Sweetness' varchar(45) NOT NULL,
 `Brand_Name` varchar(45) NOT NULL,
 'Vintage' varchar(45) NOT NULL,
 'Origin' varchar(45) NOT NULL,
 'Volume' varchar(45) NOT NULL,
 `Code_Num` varchar(45) NOT NULL,
 `Cultivars` varchar(45) NOT NULL,
 `Category` varchar(45) NOT NULL,
 'Description' longtext NOT NULL,
 `Cost_per_bottle` varchar(45) NOT NULL,
 `Cost_per_glass` varchar(45) NOT NULL,
 `Price_Category` varchar(45) NOT NULL,
 `Lot_ID` int NOT NULL,
 PRIMARY KEY (`WineID`, `Lot_ID`),
 UNIQUE KEY `WineID_UNIQUE` (`WineID`),
 KEY `Lot_ID_idx` (`Lot_ID`),
 CONSTRAINT `Lot_ID` FOREIGN KEY (`Lot_ID`) REFERENCES `lot` (`Lot_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

```
CREATE TABLE `wine_festival` (
 `BusinessID` int NOT NULL,
 `wine_festival` int NOT NULL AUTO_INCREMENT,
 PRIMARY KEY (`BusinessID`, `wine_festival`),
 UNIQUE KEY `wine_festival_UNIQUE` (`wine_festival`),
 CONSTRAINT `BusinessIDfes` FOREIGN KEY (`BusinessID`) REFERENCES `business` (`Business_ID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
CREATE TABLE `wine_lot` (
 `WineID` int NOT NULL,
 `Lot_ID` int NOT NULL,
 'WineQuantity' int NOT NULL,
 PRIMARY KEY ('WineID', 'Lot_ID'),
 KEY `LotIDwlot_idx` (`Lot_ID`),
 CONSTRAINT `LotIDwlot` FOREIGN KEY (`Lot_ID`) REFERENCES `lot` (`Lot_ID`),
 CONSTRAINT `WineIDwlot` FOREIGN KEY (`WineID`) REFERENCES `wine` (`WineID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
CREATE TABLE `wine_reviews` (
 `Wine_ID` int NOT NULL,
 'UserID' int NOT NULL,
 'Rating' int NOT NULL,
 'Comment' mediumtext NOT NULL,
 PRIMARY KEY ('Wine_ID', 'UserID'),
 KEY `User_ID_idx` (`UserID`),
 CONSTRAINT 'User' FOREIGN KEY ('UserID') REFERENCES 'user' ('UserID'),
 CONSTRAINT 'Wine_ID' FOREIGN KEY ('Wine_ID') REFERENCES 'wine' ('WineID')
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```

```
CREATE TABLE `wine_route` (

`BusinessID` int NOT NULL,

`RouteID` int NOT NULL,

PRIMARY KEY (`BusinessID`, `RouteID`),

CONSTRAINT `BusinessIDWR` FOREIGN KEY (`BusinessID`) REFERENCES `business` (`Business_ID`)

) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_0900_ai_ci
```