**TABLES:**

-- Employee table

CREATE TABLE Employee (

ID INT AUTO\_INCREMENT PRIMARY KEY,

Name VARCHAR(100) NOT NULL,

Contact VARCHAR(15),

JoinDate DATE NOT NULL,

Address VARCHAR(255)

);

-- Customer table

CREATE TABLE Customer (

ID INT AUTO\_INCREMENT PRIMARY KEY,

Name VARCHAR(100) NOT NULL,

Contact VARCHAR(15) NOT NULL,

Sex VARCHAR(10),

Purpose VARCHAR(255),

Address VARCHAR(255),

PlanID INT,

FOREIGN KEY (PlanID) REFERENCES Plan(ID)

);

-- Plan table

CREATE TABLE Plan (

ID INT AUTO\_INCREMENT PRIMARY KEY,

PlanName VARCHAR(50) NOT NULL,

Speed VARCHAR(20),

Cost DECIMAL(10, 2) NOT NULL,

Duration VARCHAR(20)

);

-- Complaint table

CREATE TABLE Complaint (

ID INT AUTO\_INCREMENT PRIMARY KEY,

Complaint TEXT NOT NULL,

Date DATE NOT NULL

);

**Aggregate function:**

SELECT SUM(Cost) AS TotalCost FROM Plan;

SELECT AVG(Cost) AS AverageCost FROM Plan;

SELECT MAX(Cost) AS MaxCost FROM Plan;

SELECT MIN(Cost) AS MinCost FROM Plan;

SELECT COUNT(\*) AS TotalPlans FROM Plan;

SELECT Duration, AVG(Cost) AS AverageCostPerDuration

FROM Plan

GROUP BY Duration;

SELECT Speed, SUM(Cost) AS TotalCostPerSpeed

FROM Plan

GROUP BY Speed;

**Rename:**

ALTER TABLE Complain

ADD PRIMARY KEY (ComplaintID);

ALTER TABLE Employee

ADD COLUMN ComplaintID INT,

ADD CONSTRAINT FK\_ComplaintID FOREIGN KEY (ComplaintID) REFERENCES Complain(ComplaintID);

ALTER TABLE Customer

ADD CONSTRAINT FK\_Customer\_Complain FOREIGN KEY (ComplaintID) REFERENCES Complain(ComplaintID);

SHOW COLUMNS FROM Complain;

**Join:**

[SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/select.html) \* FROM Customer [LEFT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/8.0/en/string-functions.html%23function_left) JOIN complain ON customer.ID = complain.ComplaintID;