```
CREATE TABLE MemberAmount (
  Level VARCHAR(15),
  HomeGym VARCHAR(64),
  Monthly_Amount DECIMAL(10,2) NOT NULL,
  PRIMARY KEY (Level, HomeGym)
  );

 CREATE TABLE Birth_Age (
  Birth_Date DATE,
  Age INT NOT NULL,
  PRIMARY KEY (Birth_Date)
  );

  CREATE TABLE Member_Details (
  Member_Id INT,
  Name VARCHAR(32) NOT NULL,
  Address VARCHAR(64) NOT NULL,
  Birth_Date DATE NOT NULL,
  Level VARCHAR(15) NOT NULL,
  HomeGym VARCHAR(64) NOT NULL,
  Balance_Amount DECIMAL(10,2) NOT NULL,
  Billing_Date DATE NOT NULL,
  Latest_Date DATE,
  Latest_Location VARCHAR(64),
  PRIMARY KEY (Member_Id),
  FOREIGN KEY (Birth_Date) REFERENCES Birth_Age(Birth_Date) ON DELETE RESTRICT ON
UPDATE RESTRICT,
  FOREIGN KEY (Level, HomeGym) REFERENCES MemberAmount(Level, HomeGym) ON DELETE
RESTRICT ON UPDATE RESTRICT
  );

CREATE TABLE ManufactureSupport (
  Manufacturer_Name VARCHAR(32) NOT NULL,
  Manufacturer_Num CHAR(10) NOT NULL,
  PRIMARY KEY (Manufacturer_Name)
  );

CREATE TABLE Equipments (
  Equipment_Id INT,
  Equipment_Type VARCHAR(32) NOT NULL,
  Manufacturer_Name VARCHAR(32) NOT NULL,
  Warranty_Date DATE,
  Location VARCHAR(64) NOT NULL,
  Warranty_Status VARCHAR(16) NOT NULL,
  Purchase_Day DATE,
  PRIMARY KEY (Equipment_Id),
  FOREIGN KEY (Manufacturer_Name) REFERENCES ManufactureSupport(Manufacturer_Name)
ON DELETE RESTRICT ON UPDATE CASCADE
  );

CREATE TABLE Service (
  Service_Name VARCHAR(64),
  Location VARCHAR(64),
  Level VARCHAR(15) NOT NULL,
  Service_Fee DECIMAL(10,2) NOT NULL,
  PRIMARY KEY (Service_Name, Location)
```

```
  );


CREATE TABLE ServiceRooms (
  Service_Name VARCHAR(32),
  Location VARCHAR(64),
  Room_No VARCHAR(16),
  PRIMARY KEY (Service_Name, Location, Room_No),
  FOREIGN KEY (Service_Name, Location) REFERENCES Service(Service_Name, Location)
ON DELETE RESTRICT ON UPDATE RESTRICT
  );

INSERT INTO Service (Service_Name, Location, Level, Service_Fee)
  VALUES ('Zumba', 'washington', 'Pro', 20.00);
INSERT INTO Service (Service_Name, Location, Level, Service_Fee)
  VALUES ('Spin', 'Fenton', 'Beginner', 25.00);
INSERT INTO Service (Service_Name, Location, Level, Service_Fee)
  VALUES ('Yoga', 'washington', 'Amateur', 25.00);
INSERT INTO Service (Service_Name, Location, Level, Service_Fee)
  VALUES ('Weightlifting', 'washington', 'Pro', 5.00);
INSERT INTO Service (Service_Name, Location, Level, Service_Fee)
  VALUES ('Yoga', 'Fenton', 'Beginner', 20.00);

select * from service;

INSERT INTO ServiceRooms (Service_Name, Location, Room_No)
  VALUES ('Zumba', 'washington', '410');
INSERT INTO ServiceRooms (Service_Name, Location, Room_No)
  VALUES ('Zumba', 'washington', '324');
INSERT INTO ServiceRooms (Service_Name, Location, Room_No)
  VALUES ('Yoga', 'washington', '105');
INSERT INTO ServiceRooms (Service_Name, Location, Room_No)
  VALUES ('Weightlifting', 'washington', '005');
INSERT INTO ServiceRooms (Service_Name, Location, Room_No)
  VALUES ('Spin', 'Fenton', '310');

INSERT INTO MemberAmount (Level, HomeGym, Monthly_Amount)
  VALUES ('Amateur', 'washington', 45.00);
INSERT INTO MemberAmount (Level, HomeGym, Monthly_Amount)
  VALUES ('Pro', 'Fenton', 25.00);
INSERT INTO MemberAmount (Level, HomeGym, Monthly_Amount)
  VALUES ('Beginner', 'washington', 15.00);
INSERT INTO MemberAmount (Level, HomeGym, Monthly_Amount)
  VALUES ('Pro', 'washington', 25.00);
INSERT INTO MemberAmount (Level, HomeGym, Monthly_Amount)
  VALUES ('Beginner', 'Fenton', 15.00);

INSERT INTO Birth_Age (Birth_Date, Age)
  VALUES ('1997-12-14', 25);
INSERT INTO Birth_Age (Birth_Date, Age)
  VALUES ('2000-02-13', 22);
INSERT INTO Birth_Age (Birth_Date, Age)
  VALUES ('1990-07-24', 32);
INSERT INTO Birth_Age (Birth_Date, Age)
  VALUES ('1975-04-18', 47);
INSERT INTO Birth_Age (Birth_Date, Age)
  VALUES ('2006-08-01', 16);

INSERT INTO Member_Details (Member_Id, Name, address, Birth_Date, Level, HomeGym,
```

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Balance_Amount, Billing_Date, Latest_Date, Latest_Location)
  VALUES (110, 'Chandu', '1301 N Oak St, Rolla', '1997-12-14', 'Beginner',
'washington', 149.00, '2021-02-26', '2021-02-19', 'Fenton');
INSERT INTO Member_Details (Member_Id, Name, address, Birth_Date, Level, HomeGym,
Balance_Amount, Billing_Date, Latest_Date, Latest_Location)
  VALUES (120, 'Dheeraj', '1201 S Iowa St, Rolla', '2000-02-13', 'Pro',
'washington', 654.00, '2021-04-27', '2021-04-20', 'washington');
INSERT INTO Member_Details (Member_Id, Name, address, Birth_Date, Level, HomeGym,
Balance_Amount, Billing_Date, Latest_Date, Latest_Location)
  VALUES (130, 'Bhanu', '1207 E 13th St, Rolla', '1990-07-24', 'Beginner',
'washington', 98.00, '2021-06-30', '2021-06-06', 'Fenton');
INSERT INTO Member_Details (Member_Id, Name, address, Birth_Date, Level, HomeGym,
Balance_Amount, Billing_Date, Latest_Date, Latest_Location)
  VALUES (140, 'Laasya', '100 Holloway St, Rolla', '1975-04-18', 'Pro', 'Fenton',
432.00, '2021-09-19', '2021-09-02', 'Fenton');
INSERT INTO Member_Details (Member_Id, Name, address, Birth_Date, Level, HomeGym,
Balance_Amount, Billing_Date, Latest_Date, Latest_Location)
  VALUES (150, 'Tarun', '410 N Walnut St, Rolla', '2006-08-01', 'Beginner',
'washington', 241.00, '2021-12-03', '2021-11-29', 'washington');


INSERT INTO ManufactureSupport (Manufacturer_Name, Manufacturer_Num)
  VALUES ('Bianchi', 7641553152);
INSERT INTO ManufactureSupport (Manufacturer_Name, Manufacturer_Num)
  VALUES ('Marin', 9234141223);
INSERT INTO ManufactureSupport (Manufacturer_Name, Manufacturer_Num)
  VALUES ('Kona', 1234512352);
INSERT INTO ManufactureSupport (Manufacturer_Name, Manufacturer_Num)
  VALUES ('Schwinn', 32415217812);
INSERT INTO ManufactureSupport (Manufacturer_Name, Manufacturer_Num)
  VALUES ('Colnago', 6321541452);


INSERT INTO Equipments (Equipment_Id, Equipment_Type, Manufacturer_Name,
Warranty_Date, Location, Warranty_Status, Purchase_Day)
  VALUES (101, 'Barbell', 'Bianchi', '2025-12-11', 'Fenton', 'Expired', '2019-11-
21');
INSERT INTO Equipments (Equipment_Id, Equipment_Type, Manufacturer_Name,
Warranty_Date, Location, Warranty_Status, Purchase_Day)
  VALUES (102, 'Rowing Machine', 'Kona', '2021-02-28', 'washington', 'Expired',
'2015-11-02');
INSERT INTO Equipments (Equipment_Id, Equipment_Type, Manufacturer_Name,
Warranty_Date, Location, Warranty_Status, Purchase_Day)
  VALUES (103, 'Kettlebell', 'Bianchi', '2019-09-29', 'Fenton', 'Active', '2015-09-
14');
INSERT INTO Equipments (Equipment_Id, Equipment_Type, Manufacturer_Name,
Warranty_Date, Location, Warranty_Status, Purchase_Day)
  VALUES (104, 'Barbell', 'Schwinn', '2020-11-25', 'Fenton', 'Active', '2015-09-
28');
INSERT INTO Equipments (Equipment_Id, Equipment_Type, Manufacturer_Name,
Warranty_Date, Location, Warranty_Status, Purchase_Day)
  VALUES (105, 'Training Bench', 'Marin', '2018-06-23', 'washington', 'Expired',
'2004-02-23');
INSERT INTO Equipments (Equipment_Id, Equipment_Type, Manufacturer_Name,
Warranty_Date, Location, Warranty_Status, Purchase_Day)
  VALUES (106, 'Threadmill', 'Marin', '2023-12-29', 'washington', 'Active', '2015-
09-16');



***************************************************************Approach
2********************************************************************
```

```
CREATE TABLE MemberAmount (
  Level VARCHAR(15),
  Home_gym VARCHAR(64),
  Monthly_amount DECIMAL(10,2) NOT NULL,
  PRIMARY KEY (Level, Home_gym)
  );

 CREATE TABLE BirthAge (
  Birth_Date DATE,
  Age INT NOT NULL,
  PRIMARY KEY (Birth_Date)
  );

  CREATE TABLE MemberDetails (
  Member_Id INT,
  Member_Name VARCHAR(32) NOT NULL,
  Address VARCHAR(64) NOT NULL,
  Birth_Date DATE NOT NULL,
  Level VARCHAR(15) NOT NULL,
  Member_standing VARCHAR(64) NOT NULL,
  Home_gym VARCHAR(64) NOT NULL,
  Balance_Amount DECIMAL(10,2) NOT NULL,
  Billing_Date DATE NOT NULL,
  Latest_Date DATE,
  Latest_Location VARCHAR(64),
  PRIMARY KEY (Member_Id),
  FOREIGN KEY (Birth_Date) REFERENCES BirthAge(Birth_Date) ON DELETE RESTRICT ON
UPDATE RESTRICT,
  FOREIGN KEY (Level, Home_gym) REFERENCES MemberAmount(Level, Home_gym) ON DELETE
RESTRICT ON UPDATE RESTRICT
  );

INSERT INTO MemberAmount (Level, Home_gym, monthly_amount)
  VALUES ('Amateur', 'VichyRoad', 20.00);
INSERT INTO MemberAmount (Level, Home_gym, monthly_amount)
  VALUES ('Pro', 'PineStreet', 25.00);
INSERT INTO MemberAmount (Level, Home_gym, monthly_amount)
  VALUES ('Beginner', 'VichyRoad', 35.00);
INSERT INTO MemberAmount (Level, Home_gym, monthly_amount)
  VALUES ('Pro', 'VichyRoad', 25.00);
INSERT INTO MemberAmount (Level, Home_gym, monthly_amount)
  VALUES ('Beginner', 'PineStreet', 35.00);

INSERT INTO BirthAge (Birth_Date, Age)
  VALUES ('2000-06-13', 22);
INSERT INTO BirthAge (Birth_Date, Age)
  VALUES ('1995-03-12', 27);
INSERT INTO BirthAge (Birth_Date, Age)
  VALUES ('1975-06-21', 47);
INSERT INTO BirthAge (Birth_Date, Age)
  VALUES ('1983-01-08', 39);
INSERT INTO BirthAge (Birth_Date, Age)
  VALUES ('2003-10-25', 20);

INSERT INTO MemberDetails (Member_Id, member_Name, address, Birth_Date, Level,
member_standing ,Home_gym, Balance_Amount, Billing_Date, Latest_Date,
Latest_Location)
  VALUES (101, 'Shyam', '1221 N Oak St, Rolla', '2000-06-13',
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'Beginner','Good' ,'VichyRoad', 250.00, '2021-04-17', '2021-02-19', 'PineStreet');
INSERT INTO MemberDetails (Member_Id, member_Name, address, Birth_Date, Level,
member_standing ,Home_gym, Balance_Amount, Billing_Date, Latest_Date,
Latest_Location)
  VALUES (102, 'Sailesh', '100 N Pine St, Rolla', '1995-03-12',
'Pro','bad' ,'VichyRoad', 324.00, '2021-02-11', '2021-12-20', 'VichyRoad');
INSERT INTO MemberDetails (Member_Id, member_Name, address, Birth_Date, Level,
member_standing ,Home_gym, Balance_Amount, Billing_Date, Latest_Date,
Latest_Location)
  VALUES (103, 'Ram', '1300 N Elm St, Rolla', '1975-06-21',
'Beginner','good' ,'VichyRoad', 80.00, '2021-01-19', '2021-06-18', 'PineStreet');
INSERT INTO MemberDetails (Member_Id, member_Name, address, Birth_Date, Level,
member_standing ,Home_gym, Balance_Amount, Billing_Date, Latest_Date,
Latest_Location)
  VALUES (104, 'Shyam', '1230 N Elm St, Rolla', '1983-01-08', 'Pro','bad',
'PineStreet', 205.00, '2021-08-29', '2021-05-25', 'PineStreet');
INSERT INTO MemberDetails (Member_Id, member_Name, address, Birth_Date, Level,
member_standing ,Home_gym, Balance_Amount, Billing_Date, Latest_Date,
Latest_Location)
  VALUES (105, 'John', '1701 N Cedar St, Rolla', '2003-10-25', 'Beginner','bad',
'VichyRoad', 320.00, '2021-04-26', '2021-08-13', 'VichyRoad');

CREATE TABLE EquipmentWarranty (
  manufacturer_name VARCHAR(32) NOT NULL,
  equipment_type VARCHAR(32) NOT NULL,
  purchase_day DATE,
  warrantydate DATE,
  warranty_status VARCHAR(64),
  PRIMARY KEY (manufacturer_name,equipment_type ,purchase_day,warrantydate)
  );


 CREATE TABLE ManufacturerSupport (
  manufacturer_name VARCHAR(32) NOT NULL,
  manufacturer_num CHAR(100) NOT NULL,
  PRIMARY KEY (manufacturer_name)
  );

  CREATE TABLE Equipments (
  manufacturer_name VARCHAR(32) NOT NULL,
  equipment_type VARCHAR(32) NOT NULL,
  equipment_quantity VARCHAR(32) NOT NULL,
  location VARCHAR(64) NOT NULL,
  purchase_day DATE,
  warrantydate DATE,
  PRIMARY KEY
(manufacturer_name,equipment_type ,equipment_quantity,location,purchase_day),
  FOREIGN KEY (manufacturer_name) REFERENCES ManufacturerSupport(manufacturer_name)
ON DELETE RESTRICT ON UPDATE CASCADE,
  FOREIGN KEY (manufacturer_name,equipment_type ,purchase_day,warrantydate)
REFERENCES
EquipmentWarranty(manufacturer_name,equipment_type ,purchase_day,warrantydate) ON
DELETE RESTRICT ON UPDATE CASCADE
  );

INSERT INTO ManufacturerSupport (manufacturer_name, manufacturer_num) VALUES
('Nautilus', '95734538975');
INSERT INTO ManufacturerSupport (manufacturer_name, manufacturer_num) VALUES
('NordicTrack', '85734564131');
```

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INSERT INTO ManufacturerSupport (manufacturer_name, manufacturer_num) VALUES
('Scwhin', '65734987657');


INSERT INTO EquipmentWarranty (manufacturer_name, equipment_type, purchase_day,
warrantydate, warranty_status)
VALUES  ('Scwhin', 'Dumbells', '2020-06-11', '2025-06-11', 'Active');

INSERT INTO EquipmentWarranty (manufacturer_name, equipment_type, purchase_day,
warrantydate, warranty_status)
VALUES  ('Nautilus', 'Pull-up balls', '2018-06-11', '2022-03-27', 'Expired');

INSERT INTO EquipmentWarranty (manufacturer_name, equipment_type, purchase_day,
warrantydate, warranty_status)
VALUES  ('Scwhin', 'Exercise bikes', '2021-10-13', '2024-06-13', 'Active');

INSERT INTO EquipmentWarranty (manufacturer_name, equipment_type, purchase_day,
warrantydate, warranty_status)
VALUES  ('NordicTrack', 'Threadmill', '2020-06-11', '2022-08-19', 'Active');

INSERT INTO EquipmentWarranty (manufacturer_name, equipment_type, purchase_day,
warrantydate, warranty_status)
VALUES  ('NordicTrack', 'Barbells', '2017-06-19', '2022-06-11', 'Expired');

INSERT INTO EquipmentWarranty (manufacturer_name, equipment_type, purchase_day,
warrantydate, warranty_status)
VALUES  ('Nautilus', 'Threadmill', '2021-06-01', '2026-06-29', 'Active');


INSERT INTO Equipments (manufacturer_name, equipment_type, equipment_quantity,
location, purchase_day, warrantydate)
VALUES  ('NordicTrack', 'Threadmill', '1', 'PineStreet', '2020-06-11', '2022-08-
19');

INSERT INTO Equipments (manufacturer_name, equipment_type, equipment_quantity,
location, purchase_day, warrantydate)
VALUES  ('NordicTrack', 'Barbells', '10', 'VichyRoad', '2017-06-19', '2022-06-11');

INSERT INTO Equipments (manufacturer_name, equipment_type, equipment_quantity,
location, purchase_day, warrantydate)
VALUES  ('Scwhin', 'Dumbells', '3', 'VichyRoad','2020-06-11', '2025-06-11');

INSERT INTO Equipments (manufacturer_name, equipment_type, equipment_quantity,
location, purchase_day, warrantydate)
VALUES  ('Nautilus', 'Threadmill','1', 'PineStreet', '2021-06-01', '2026-06-29');

INSERT INTO Equipments (manufacturer_name, equipment_type, equipment_quantity,
location, purchase_day, warrantydate)
VALUES  ('Nautilus', 'Pull-up balls','1', 'VichyRoad', '2018-06-11', '2022-03-27');

INSERT INTO Equipments (manufacturer_name, equipment_type, equipment_quantity,
location, purchase_day, warrantydate)
VALUES  ('Scwhin', 'Exercise bikes','1', 'PineStreet', '2021-10-13', '2024-06-13');




CREATE TABLE Services (
```

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  service_name VARCHAR(64),
  service_location VARCHAR(64),
  level VARCHAR(15) NOT NULL,
  service_fee DECIMAL(10,2) NOT NULL,
  PRIMARY KEY (service_name,service_location)
  );


CREATE TABLE ServiceRooms (
  service_name VARCHAR(32),
  service_location VARCHAR(64),
  room_no VARCHAR(16),
  PRIMARY KEY (service_name, service_location, room_no),
  FOREIGN KEY (service_name, service_location) REFERENCES Services(service_name,
service_location) ON DELETE RESTRICT ON UPDATE RESTRICT
  );
INSERT INTO Services (service_name,service_location, level, service_fee) VALUES
('4-star', 'VichyRoad', 'Amateur', '300');
INSERT INTO Services (service_name,service_location, level, service_fee) VALUES
('1-star', 'VichyRoad', 'Beginner', '200');
INSERT INTO Services (service_name,service_location, level, service_fee) VALUES
('1-star', 'PineStreet', 'Beginner', '100');
INSERT INTO Services (service_name,service_location, level, service_fee) VALUES
('3-star', 'PineStreet', 'Pro', '600');
INSERT INTO Services (service_name,service_location, level, service_fee) VALUES
('3-star', 'VichyRoad', 'Pro', '500');
INSERT INTO Services (service_name,service_location, level, service_fee) VALUES
('4-star', 'PineStreet', 'Amateur', '400');
INSERT INTO Services (service_name,service_location, level, service_fee) VALUES
('2-star', 'PineStreet', 'Amateur', '400');

INSERT INTO ServiceRooms (service_name,service_location, room_no) VALUES  ('4-
star', 'VichyRoad', '12');
INSERT INTO ServiceRooms (service_name,service_location, room_no) VALUES  ('1-
star', 'PineStreet', '13');
INSERT INTO ServiceRooms (service_name,service_location, room_no) VALUES  ('3-
star', 'PineStreet', '14');
INSERT INTO ServiceRooms (service_name,service_location, room_no) VALUES  ('2-
star', 'PineStreet', '13');
INSERT INTO ServiceRooms (service_name,service_location, room_no) VALUES  ('4-
star', 'VichyRoad', '14');
```