Modify below "INSERT INTO Supplier" statement to fix the below SQL error when executing "INSERT INTO Product"

INSERT INTO Supplier (SupplierName) VALUES

('Samsung Electronics'),

('Apple Inc.'),

('Dell Technologies'),

('HP Inc.'),

('Sony Corporation');

INSERT INTO Product (ProductName, ImportPrice, ListPrice, Quantity, Discount, DateAdded, SupplierID, ProductTypeCode) VALUES

('Samsung Galaxy S21', 18000000, 20000000, 100, 5.00, '2023-01-10', 1, 'Mobile'),

('Apple iPhone 15', 22000000, 25000000, 80, 3.00, '2023-02-15', 2, 'Mobile'),

('Dell Inspiron 15', 16000000, 18000000, 50, 7.50, '2023-03-05', 3, 'Laptop'),

('HP Pavilion 14', 13000000, 15000000, 60, 6.00, '2023-04-10', 4, 'Laptop'),

('Sony WH-1000XM4', 3600000, 3800000, 120, 4.50, '2023-05-20', 5, 'Headphones'),

('MacBook Pro 16-inch', 40000000, 41000000, 30, 2, '2023-09-15', 2, 'LAPTOP'),

('Asus Zenfone Max', 8500000, 9000000, 100, 5, '2023-06-10', 6, 'Mobile'),

('Huawei P Smart', 8200000, 9500000, 80, 4, '2023-07-10', 7, 'Mobile'),

('Xiaomi Redmi Note 10', 8800000, 10000000, 90, 3, '2023-06-25', 8, 'Mobile'),

('Lenovo ThinkPad E14', 7900000, 9900000, 60, 2.5, '2023-08-15', 9, 'Laptop');

SQL Error [1452] [23000]: Cannot add or update a child row: a foreign key constraint fails (`ProductSystem`.`Product`, CONSTRAINT `Product\_ibfk\_1` FOREIGN KEY (`SupplierID`) REFERENCES `Supplier` (`SupplierID`))

Ans:

The SQL error indicates that there is an attempt to insert a record into the **Product** table with a **SupplierID** value that does not exist in the **Supplier** table. Specifically, the **Product** table has foreign key constraints set up to ensure data integrity, which means you can't have a product with a **SupplierID** that isn't present in the **Supplier** table.

To fix this error, you need to make sure that all **SupplierID** values referenced in the **INSERT INTO Product** statement exist in the **Supplier** table.

Given the statements you've provided, the **Supplier** table has 5 records with **SupplierID** values from 1 to 5. But in the **INSERT INTO Product** statement, there are references to **SupplierID** values 6, 7, 8, and 9 which do not exist in the **Supplier** table.

To resolve this, you can add the missing suppliers in the **INSERT INTO Supplier** statement:

INSERT INTO Supplier (SupplierName) VALUES

('Samsung Electronics'),

('Apple Inc.'),

('Dell Technologies'),

('HP Inc.'),

('Sony Corporation'),

('Asus'), -- SupplierID 6

('Huawei'), -- SupplierID 7

('Xiaomi'), -- SupplierID 8

('Lenovo'); -- SupplierID 9

After executing the modified INSERT INTO Supplier statement, you can then execute the INSERT INTO Product statement without encountering the foreign key constraint error.