

HW4 - FamCation

Step 2 CONDO

```
Object Explorer Details    SQLQuery5.sql - w...AD\mchhabr5 (174))    SQLQuery4.sql - w...AD\mchhabr5 (150))    SQLQuery1.sql - w...AD\mchhabr5 (174))
--
DROP TABLE IF EXISTS CONDO;
DROP TABLE IF EXISTS FAMILY;
DROP TABLE IF EXISTS CLEANING;
DROP TABLE IF EXISTS BOOKING;
CREATE TABLE CONDO (
    BldgNum char(1) NOT NULL,
    UnitNum char(3) NOT NULL,
    SqrFt smallint NOT NULL,
    Bdrms tinyint NOT NULL,
    Baths tinyint NOT NULL,
    DailyRate decimal(7,2) NOT NULL,
    PRIMARY KEY (BldgNum, UnitNum)
);
```

FAMILY

```
Object Explorer Details    SQLQuery5.sql - w...AD\mchhabr5 (174))    SQLQuery4.sql - w...AD\mchhabr5 (150))    SQLQuery1.sql - w...AD\mchhabr5 (174))
--
CREATE TABLE FAMILY (
    GuestID varchar(4) NOT NULL,
    FName varchar(15) NOT NULL,
    Relationship varchar(10) NOT NULL,
    Birthdate date NOT NULL,
    PRIMARY KEY (GuestID, FName),
    FOREIGN KEY (GuestID) REFERENCES GUEST(GuestID)
);
```

CLEANING

```
Object Explorer Details    SQLQuery5.sql - w...AD\mchhabr5 (174))    SQLQuery4.sql - w...AD\mchhabr5 (150))    SQLQuery1.sql - w...AD\mchhabr5 (174))
--
CREATE TABLE CLEANING (
    ScheduleID int IDENTITY(1000,1) PRIMARY KEY,
    BldgNum char(1) NOT NULL,
    UnitNum char(3) NOT NULL,
    HKID char(4) NOT NULL,
    DateCleaned date NOT NULL,
    FOREIGN KEY (BldgNum, UnitNum) REFERENCES CONDO(BldgNum, UnitNum),
    FOREIGN KEY (HKID) REFERENCES HOUSEKEEPER(HKID)
);
```

BOOKING

```
Object Explorer Details    SQLQuery5.sql - w...AD\mchhabr5 (174))    SQLQuery4.sql - w...AD\mchhabr5 (150))    SQLQuery1.sql - w...AD\mchhabr5 (174))
--
CREATE TABLE BOOKING (
    BookID int IDENTITY(100,1) PRIMARY KEY,
    BldgNum char(1) NOT NULL,
    UnitNum char(3) NOT NULL,
    GuestID varchar(4) NOT NULL,
    StartDate date NOT NULL,
    EndDate date NOT NULL,
    FOREIGN KEY (BldgNum, UnitNum) REFERENCES CONDO(BldgNum, UnitNum),
    FOREIGN KEY (GuestID) REFERENCES GUEST(GuestID)
);
```

Step 3 Error 1

```
SQLQuery6.sql - w...AD\mchhabr5 (65))"  SQLQuery3.sql - w...AD\mchhabr5 (174))  SQLQuery4.sql - w...AD\mchhabr5 (150))  SQLQuery1.sql - w...AD\mchhabr5 (57))  SQLQuery3.sql - w...AD\mchhabr5 (103))"
insert into CLEANING values ('C',204,'MC02','25-May-22');
insert into CLEANING values ('C',205,'TH01','6-Jul-22');
insert into CLEANING values ('A',201,'ES01','13-Jul-22');
insert into CLEANING values ('A',202,'GB01','25-May-22');
insert into CLEANING values ('A',203,'HF01','10-Aug-22');
insert into CLEANING values ('A',204,'JP01','22-Jun-22');
insert into CLEANING values ('A',205,'AJ01','10-Aug-22');
insert into CLEANING values ('B',201,'MC02','13-Jul-22');
insert into CLEANING values ('B',202,'TH01','27-Jul-22');
insert into CLEANING values ('B',203,'ES01','25-May-22');
insert into CLEANING values ('B',204,'GB01','10-Aug-22');
insert into CLEANING values ('B',205,'JP01','3-Aug-22');
insert into CLEANING values ('C',201,'MC02','3-Aug-22');
insert into CLEANING values ('C',202,'MC02','17-Aug-22');
insert into CLEANING values ('C',203,'TH01','10-Aug-22');
insert into CLEANING values ('C',204,'ES01','10-Aug-22');
insert into CLEANING values ('C',205,'GB01','3-Aug-22');
insert into CLEANING values ('A',301,'JP01','22-Jun-22');
insert into CLEANING values ('A',302,'MC02','6-Jul-22');
insert into CLEANING values ('A',303,'JP01','17-Aug-22');

100 %
Messages
Msg 2628, Level 16, State 1, Line 74
String or binary data would be truncated in table '73614_mchhabr5.dbo.CONDO', column 'UnitNum'. Truncated value: '205'.
The statement has been terminated.
```

Explanation

Violation of domain integrity – The error message indicates that the string or binary data was truncated, which suggests that the value being inserted into the 'UnitNum' column exceeds the defined column width.

Error 2

```
Msg 2627, Level 14, State 1, Line 171
Violation of PRIMARY KEY constraint 'FK_ACTIVITY__AF1624F0C6B50E2C'. Cannot insert duplicate key in object 'dbo.ACTIVITY'. The duplicate key value is (B6).
The statement has been terminated.
```

Explanation

Violation of entity integrity – This error occurs because there is an attempt to insert a duplicate value ('B6') into the primary key column of the **ACTIVITY** table, which must be unique for each record.

Error 3

```
Msg 547, Level 16, State 0, Line 198
The INSERT statement conflicted with the CHECK constraint "CK__HOUSEKEEP__Shift__4B422AD5". The conflict occurred in database "73614_mchhabr5", table "dbo.HOUSEKEEPER", column 'Shift'.
The statement has been terminated.
```

Explanation

Violation of domain integrity – This error indicates that the value attempted to be inserted into the 'Shift' column of the HOUSEKEEPER table does not meet the conditions specified by the CHECK constraint "CK__HOUSEKEEP__Shift__4B422AD5".

Error 4

```
Msg 547, Level 16, State 0, Line 216
The INSERT statement conflicted with the FOREIGN KEY constraint "FK__GUIDE__GuideID__51F2864". The conflict occurred in database "73614_mchhabr5", table "dbo.EMPLOYEE", column 'EmpID'.
The statement has been terminated.
```

Explanation

Violation of referential integrity – This error indicates that an attempt to insert a record into a table with a foreign key reference failed because the value for the 'GuideID' does not exist in the referenced column 'EmpID' in the EMPLOYEE table.

Step 4.1

```
SQLQuery6.sql - w...AD\mchhabr5 (65))* SQLQuery5.sql - w...AD\mchhabr5 (174)) SQLQuery4.sql - w...AD\mchhabr5 (150)) SQLQuery1.sql - w...AD\mchhabr5 (57))

-- Inserting you, Maherdeep Chhabra, as the manager of the Technology department, reporting to CEO Evan Neilson ('NE01')
INSERT INTO EMPLOYEE (EmpID, LName, MName, FName, Gender, Phone, Hiredate, MgrNum, Department, Salary, EType)
VALUES ('MC10', 'Chhabra', ' ', 'Maherdeep', 'M', '480-555-0001', '2023-01-01', 'NE01', 'Technology', 100000, 'M');

-- Inserting four Technology department employees managed by you
INSERT INTO EMPLOYEE (EmpID, LName, MName, FName, Gender, Phone, Hiredate, MgrNum, Department, Salary, EType)
VALUES ('IT01', 'Smith', ' ', 'John', 'M', '480-555-0002', '2023-01-01', 'MC10', 'Technology', 100000, 'S');

INSERT INTO EMPLOYEE (EmpID, LName, MName, FName, Gender, Phone, Hiredate, MgrNum, Department, Salary, EType)
VALUES ('IT02', 'Doe', ' ', 'Jane', 'F', '480-555-0003', '2023-01-01', 'MC10', 'Technology', 100000, 'S');

INSERT INTO EMPLOYEE (EmpID, LName, MName, FName, Gender, Phone, Hiredate, MgrNum, Department, Salary, EType)
VALUES ('IT03', 'Brown', ' ', 'Charlie', 'M', '480-555-0004', '2023-01-01', 'MC10', 'Technology', 100000, 'S');

INSERT INTO EMPLOYEE (EmpID, LName, MName, FName, Gender, Phone, Hiredate, MgrNum, Department, Salary, EType)
VALUES ('IT04', 'Johnson', ' ', 'Gary', 'M', '480-555-0005', '2023-01-01', 'MC10', 'Technology', 100000, 'S');
```

Step 4.2

```
SQLQuery6.sql - w...AD\mchhabr5 (65))* SQLQuery5.sql - w...AD\mchhabr5 (174)) SQLQuery4.sql - w...AD\mchhabr5 (150))

VALUES ('IT02', 'Doe', ' ', 'Jane', 'F', '480-555-0003', '2023-01-01', 'MC10', 'Technology', 100000, 'S');

INSERT INTO EMPLOYEE (EmpID, LName, MName, FName, Gender, Phone, Hiredate, MgrNum, Department, Salary, EType)
VALUES ('IT03', 'Brown', ' ', 'Charlie', 'M', '480-555-0004', '2023-01-01', 'MC10', 'Technology', 100000, 'S');

INSERT INTO EMPLOYEE (EmpID, LName, MName, FName, Gender, Phone, Hiredate, MgrNum, Department, Salary, EType)
VALUES ('IT04', 'Johnson', ' ', 'Gary', 'M', '480-555-0005', '2023-01-01', 'MC10', 'Technology', 100000, 'S');

SELECT *
FROM EMPLOYEE
WHERE Department = 'Technology'
AND Hiredate = '2023-01-01';
```

100 %

Results Messages

	EmpID	LName	MName	FName	Gender	Phone	Hiredate	MgrNum	Department	Salary	EType
1	IT01	Smith		John	M	480-555-0002	2023-01-01	MC10	Technology	100000.00	S
2	IT02	Doe		Jane	F	480-555-0003	2023-01-01	MC10	Technology	100000.00	S
3	IT03	Brown		Charlie	M	480-555-0004	2023-01-01	MC10	Technology	100000.00	S
4	IT04	Johnson		Gary	M	480-555-0005	2023-01-01	MC10	Technology	100000.00	S
5	MC10	Chhabra		Maherdeep	M	480-555-0001	2023-01-01	NE01	Technology	100000.00	M

Statement: SELECT *
FROM EMPLOYEE
WHERE Department = 'Technology'
AND Hiredate = '2023-01-01';

Step 5

SQLQuery6.sql - w...AD\mchhbr5 (65))* Object Explorer Details SQLQuery5.sql - w...AD\mchhbr5 (174)) SQLQuery4.sql - w...AD\mchhbr5 (150))

Back Forward Search

wpcms.sql.cloud.wpcarey.asu.edu\CIS407 (SQL Server 15.0.2116.2 - ASUAD\mchhbr5)\Databases\73614_mchhbr5\Tables

Name	Schema	Create Date	Policy Health State	Row Count
System Tables				
FileTables				
External Tables				
Graph Tables				
ACTIVITY	dbo	10/6/2024 4:32 PM		30
BOOKING	dbo	10/6/2024 4:32 PM		234
CLEANING	dbo	10/6/2024 4:32 PM		169
CONDO	dbo	10/6/2024 4:32 PM		45
EMPLOYEE	dbo	10/6/2024 4:32 PM		44
FAMILY	dbo	10/6/2024 4:32 PM		55
GUEST	dbo	10/6/2024 4:32 PM		35
GUIDE	dbo	10/6/2024 4:32 PM		12
GUIDE_LEVEL	dbo	10/6/2024 4:32 PM		3
HOUSEKEEPER	dbo	10/6/2024 4:32 PM		14
RESERVATION	dbo	10/6/2024 4:32 PM		149