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Section: 4

Section 1: Provide **THREE (3)** improvements for this ERD:

(3 marks)

Problem Found	Solution
StaffId cannot be of type integer	Change to of type varchar
Unspecific Id attribute name in training, drugmanufacturer, insurance, Bill	Change to a more meaningful PK and FK name such as trainingId, drugId, insuranceId
Id in Bill entity has no reference	Change the name Id to something else or provide a valid relation

Section 2: The designer seem is a junior database designer. Please identify **TWO (2)** best practice and provide the solution to the database designer.

(2 marks)

Problem Found	Solution
Add in Patient is a reserve word	Don't user reserve keywords, use Address instead.
No relationship identifications	For example, Consultation---generates---Bill

Section 3: Identity bug(s). Provide the solution(s).

(1 mark)

Your answer:

**BUG:**

In the staff table, there are two constraints name are duplicates (staff\_nn).

**SOLUTION:**

Rename one of the constraints into something different, such as staff\_name\_nn, or etc

Thanks for the solution. Bug(s) is/are solved.

Section 4: Identity bug(s). Provide the solution(s). (Tips: This three tables have a common bug.)

(1 mark)

Your answer:

**BUG:**

The final line for StaffId, Room, Phone "CREATE TABLE" command should not have a comma "," at the end.

**SOLUTION:**

Remove the comma at the end of each commands.

Thanks for the solution. Bug(s) is/are solved.

Section 5: Identity bug(s). Provide the solution(s).

(-1 mark if incorrect)

Your answer:

**BUG:**

In table Appointment, incorrect reference "jobs (Patient)".

**SOLUTION:**

Delete the "jobs(Patient)" in the command line and replace it with Patient(PatientId)

Thanks for the solution. Bug(s) is/are solved.

Section 6: Identity bug(s). Provide the solution(s).

(-1 mark if incorrect)

Your answer:

**BUG:**

In CREATE TABLE Bill, ConID does not exist

**SOLUTION:**

Replace with ConsultationId

Thanks for the solution. Bug(s) is/are solved.

Section 7: Identity bug(s). Provide the solution(s).

(-1 mark if incorrect)

Your answer:

**BUG:**

1. "SELECCT" identifier is invalid.
2. The value "StaffName" is invalid.
3. Th value "Stafflc" invalid.

**SOLUTION:**

1. Replace "SELECCT" with "SELECT"
2. Insert integer value
3. Insert String value

Thanks for the solution. Bug(s) is/are solved.

Section 8: Identity bug(s). Provide the solution(s).

(3 marks)

Your answer:

**BUG:**

The tables that have constraints cannot be dropped until they are removed.

**SOLUTION:**

Remove the constraints in each table before dropping the tables

Thanks for the solution. Bug(s) is/are solved.

**Mission Complete. Thank you. You are the BEST programmer ever. See you again next time.**