Homework 2 – Normalization and Database Schema Creation

Dependencies:

1.

- a. {PatientNum} → {PatientName, PatientAddress, CityStateZip}
- b. {BillNum} → {BillingDate, DateAdmitted, DateDischarged, DateCharged, Charge, PatientNum, ItemCode}
- c. $\{CostCenter\} \rightarrow \{CostName\}$
- d. {ItemCode} → {Description}
- 2. Primary Key is { BillNum }

Normalization:

First Normal Form

PatientNum	PatientName	PatientAddress	CityStateZip	BillNum	BillingDate	DateAdmitted	DateDischarged	CostCenter	CostName	DateCharged	ItemCode	Description	Charge	
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Second Normal Form

Patient (PatientNum, PatientName, PatientAddress, City, State, Zip)

Bill (BillNum, BillingDate, DateAdmitted, DateDischarged, Charge, PatientNum)

Third Normal Form

Patient (PatientNum, PatientName, PatientAddress, CityStateZip)

Bill (BillNum, BillingDate, DateAdmitted, DateDischarged, Charge, PatientNum, ItemCode)

Center (CostCenter, CostName)

Item (<u>ItemCode</u>, Description)