CS430 Homework 7

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Due: Sunday, May 7, 2023

Question 1 (80 points)

Given the relation with the following attributes ACFSBDM.

Note that C is the key. This relation has this set of functional dependencies: FS $\rightarrow$ B, A $\rightarrow$ D.

 a) Explain why this relation is not in BCNF.

 b) Decompose this relation into BCNF.

Question 2 (20 points)

Write the SQL statements to:

 a) Create user joe with password joe123.

```
CREATE USER joe IDENTIFIED BY joe123;
```

 b) Write the SQL statement to give SELECT and INSERT access to user joe to table Sailors. Give access such that user joe can further give access to other users.

```
GRANT SELECT, INSERT ON Sailors TO joe WITH ADMIN OPTION;
```