Class Exercise – 6.2

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Clemson/Assignment ID: normal2
Submission: Save this Word document with your answers as a PDF file and upload the PDF file to Canvas.

Normalization
Using the STUDENT table structure shown, answer the following questions:

STUDENT Table

Attribute Name	Sample Value	Sample Value	Sample Value	Sample Value	Sample Value
STU_NUM	211343	200128	199876	199876	223456
STU_LNAME	Stephanos	Smith	Jones	Ortiz	McKulski
STU_MAJOR	Accounting	Accounting	Marketing	Marketing	Statistics
DEPT_CODE	ACCT	ACCT	MKTG	MKTG	MATH
DEPT_NAME	Accounting	Accounting	Marketing	Marketing	Mathematics
DEPT_PHONE	4356	4356	4378	4378	3420
COLLEGE_NAME	Business Admin	Business Admin	Business Admin	Business Admin	Arts & Sciences
ADVISOR_LNAME	Grastrand	Grastrand	Gentry	Tillery	Chen
ADVISOR_OFFICE	T201	T201	T228	T356	J331
ADVISOR_BLDG	Torre Building	Torre Building	Torre Building	Torre Building	Jones Building
ADVISOR_PHONE	2115	2115	2123	2159	3209
STU_GPA	3.87	2.78	2.31	3.45	3.58
STU_HOURS	75	45	117	113	87
STU_CLASS	Junior	Sophomore	Senior	Senior	Junior

1. **Write the relational schema. You can assume that the table does not contain repeating groups.**

Schema: (<u>STU_NUM</u>, STU_LNAME, STU_MAJOR, DEPT_CODE, DEPT_NAME, DEPT_PHONE, COLLEGE_NAME, ADVISOR_LNAME, ADVISOR_OFFICE, ADVISOR_BLDG, ADVISOR_PHONE, STU_GPA, STU_HOURS, CTY_CLASS)

2. **Identify any partial dependencies and generate the 2NF tables/schemas.**

There are no partial dependencies because the primary key is not a composite key.

3.   Identify any transitive dependencies and generate the 3NF tables/schemas.