2. Use the database shown in the figure below to answer the following questions.

STUDENT

StudentID	SFirstName	SLastName	SEmail	AdviserID
B01234765	Matthew	Andrews	Matthew.Andrews@ourcampus.edu	346723
B01234766	Lisa	Brisbon	Lisa.Brisbon@ourcampus.edu	346724
B01234767	Douglas	Fischer	Douglas.Fischer@ourcampus.edu	346725
B01234768	Terry	Hwang	Terry.Hwang@ourcampus.edu	346726
B01234769	Tzu	Lai	Tzu.Lai@ourcampus.edu	346727
B01234770	Chip	Marino	Chip.Marino@ourcampus.edu	346728
B01234771	James	Thompson	James.Thompson@ourcampus.edu	346723
B01234772	Johnson	Ariel	JohnsonAriel@ourcampus.edu	346724
B01234773	Robin	Garcia	Robin.Garcia@ourcampus.edu	346725
B01234774	Charles	Arles	JAA@ourcampus.edu	346726
B01234775	Jeffery	Pearson	Jpearson@ourcampus.edu	346727
B01234775	Miguel	Sears	msears@ourcampus.edu	346728

ADVISOR

AdviserID	AFirstName	ALastName	AEmail	DeptID
346723	Linda	Baker	Linda.Baker@ourcampus.edu	1
346724	Richard	Valdez	Richard.Valdez@ourcampus.edu	2
346725	Mike	Casey	Mike.Casey@ourcampus.edu	2
346726	Susan	Taing	Susan.Taing@ourcampus.edu	3
346727	Shuaifu	Lin	SF.Lin@ourcampus.edu	3
346728	Tim	Myers	Tim.Myers@ourcampus.edu	4

DEPARTMENT

DeptID	DeptName	College	DeptExt
1	Accounting	Business	1234
2	Management	Business	2234
3	Management Information Systems	Business	3234

a. For each table, identify the primary keys and foreign keys. Write “None” or “NA” when there’s no foreign keys.

Answer here:

Table	Primary Key	Foreign Key(s)
STUDENT	StudentID	AdvisorID
ADVISOR	AdvisorID	DeptID
DEPARTMENT	DeptID	NA/None

FK: not PK in one table, but is primary key for another table

b. Explain entity integrity. Do the tables exhibit entity integrity?

Answer here:

Entity integrity means __ PK Values must be unique and not NULL (null = not having value)__

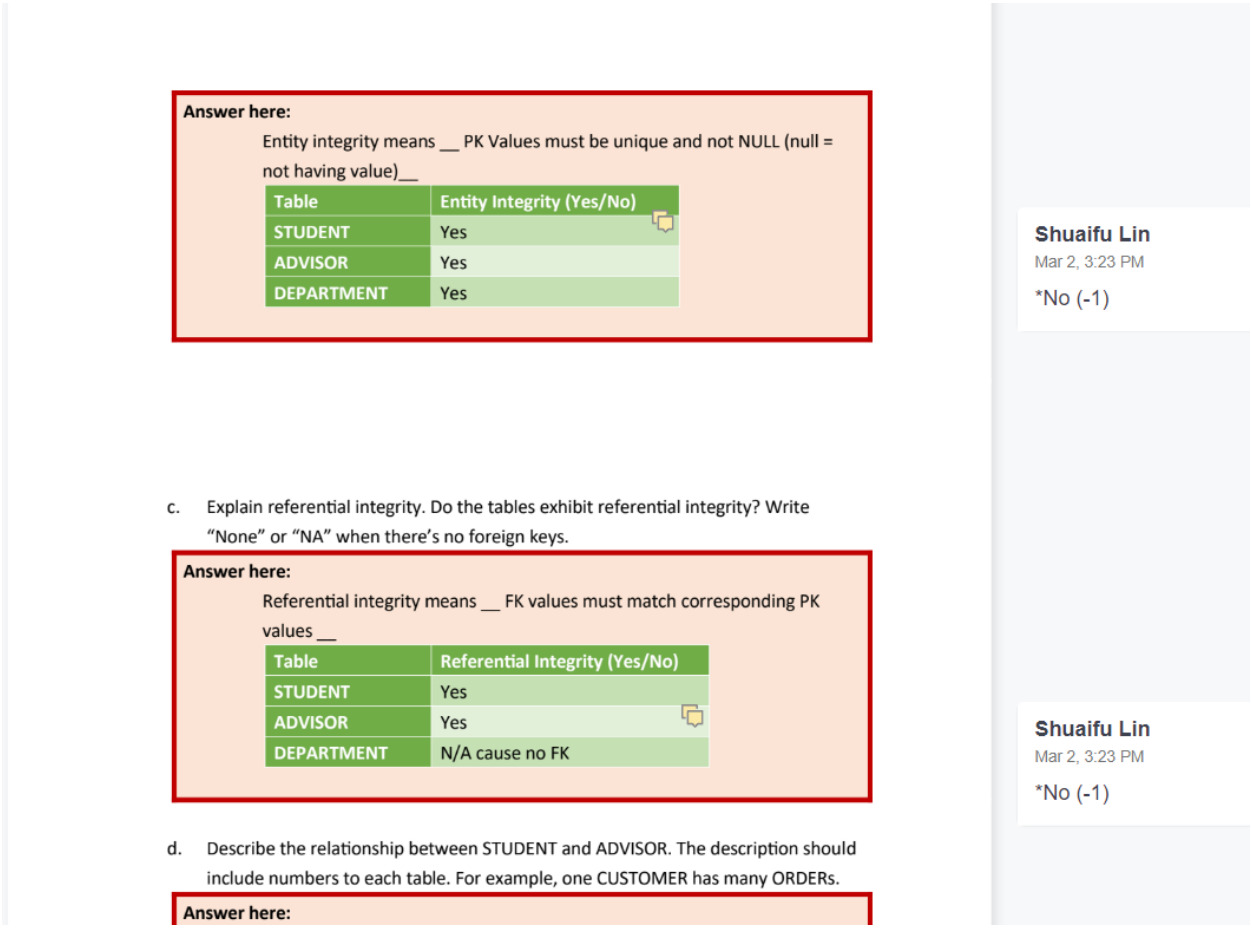
Table	Entity Integrity (Yes/No)
STUDENT	**NO** (look at the repeat towards the end)
ADVISOR	Yes
DEPARTMENT	Yes

c. Explain referential integrity. Do the tables exhibit referential integrity? Write “None” or “NA” when there’s no foreign keys.

Answer here:

Referential integrity means __ FK values must match corresponding PK values __

Table	Referential Integrity (Yes/No)
STUDENT	Yes
ADVISOR	**NO** (there's no 4 in Dept Table)
DEPARTMENT	N/A cause no FK



Answer here:

Entity integrity means __ PK Values must be unique and not NULL (null = not having value)__

Table	Entity Integrity (Yes/No)
STUDENT	Yes
ADVISOR	Yes
DEPARTMENT	Yes

Shuaifu Lin
Mar 2, 3:23 PM
*No (-1)

c. Explain referential integrity. Do the tables exhibit referential integrity? Write "None" or "NA" when there's no foreign keys.

Answer here:

Referential integrity means __ FK values must match corresponding PK values __

Table	Referential Integrity (Yes/No)
STUDENT	Yes
ADVISOR	Yes
DEPARTMENT	N/A cause no FK

Shuaifu Lin
Mar 2, 3:23 PM
*No (-1)

d. Describe the relationship between STUDENT and ADVISOR. The description should include numbers to each table. For example, one CUSTOMER has many ORDERs.

Answer here:

d. Describe the relationship between STUDENT and ADVISOR. The description should include numbers to each table. For example, one CUSTOMER has many ORDERs.

Answer here:

One student has one advisor (one to one), but an advisor can have/work with many students (one to many)

e. Describe the relationship between ADVISOR and DEPARTMENT. The description should include numbers to each table, and in both directions. The description should include numbers to each table. For example, one CUSTOMER has many ORDERs.

Answer here:
An advisor works in one department (one to one), but a department can have many advisors (one to many)

f. Create the data model for these tables and relationships.

Paste Your Answer Diagram Here: