

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

STUDENT					DEPARTMENT			
StudentID	SFirstName	SLastName	SEmail	AdvisorID	DeptID	DeptName	College	DeptExt
B01234765	Matthew	Andrews	Matthew.Andrews@ourcampus.edu	346723	1	Accounting	Business	1234
B01234766	Lisa	Brisbon	Lisa.Brisbon@ourcampus.edu	346724	2	Management	Business	2234
B01234767	Douglas	Fischer	Douglas.Fischer@ourcampus.edu	346725	3	Management Information Systems	Business	3234
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								
AdvisorID	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				

- 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	Yes
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	Yes
DEPARTMENT	N/A cause no FK

- 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:

