Computer Science

COMPSCI 111/111G — Mastering Cyberspace

Database 01
Exercise Sheet

Exercise 1: State the difference between a database and a database management system.
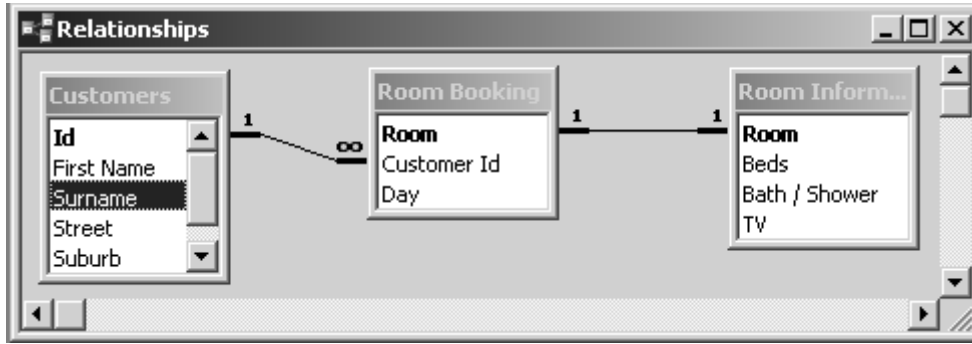
Exercise 2: What is a primary key?

Exercise 3: What is a foreign key?

Exercise 4: Look at the following screenshot of a table. What would be the best field(s) to use as a primary key, and why?

	Surname	First Name	Birth Date	Year Graduated	Address	Phone
	Jones	Abel	2/03/1974	1988	12 Blah Rd	555-5555
	Smith	Bert	12/06/1981	1998	178A Beach Pa	893-7654
▶				0		

Examine the screenshot below that shows the relationship between tables in a database:

Exercise 5: State the primary key and foreign key (if it exists) of the Customers table

Exercise 6: State the primary key and foreign key (if it exists) of the Room Booking table

Exercise 7: State the primary key and foreign key (if it exists) of the Room Information table

Exercise 8: What is wrong with this database design? What simple change to a primary key would improve the database design?