**Homework #1**

*1. Does the SIGNING table have entity integrity? Why or why not?*

No. The SIGNING table does not have entity integrity, due to the duplication of “10” in the SIGN\_ID primary key column.

*2. Does the BOOK table have entity integrity? Why or why not?*

Yes. The BOOK table has entity integrity, because the BOOK\_ID primary key does not contain any nulls or duplicates.

*3. Does the WRITES table have entity integrity? Why or why not?*

Yes. The WRITES table does have entity integrity. Although there are duplicate values in the AU\_ID and BOOK\_ID columns, the WRITES table does not contain any nulls and has unique values of the composite primary key of both AU\_ID and BOOK\_ID.

*4. Does the BOOK table have referential integrity in its relationship with PUBLISHER? Why or why not?*

No. The BOOK table contains a foreign key (P6) that does not exist in the PUBLISHER table.

*5. Does the WRITES table have referential integrity in its relationship with AUTHOR? Why or why not?*

Yes. The WRITES table has all foreign key references to existing primary keys in the AUTHOR table. Even if there are not a null in your problem, you have to say that nulls are acceptable in primary keys.

*6. Does the AUTHOR table have referential integrity in its relationship with SIGNING? Why or why not?*

Referential integrity does not apply to the AUTHOR table. There is not a foreign key in the AUTHOR table, and therefore referential integrity does not apply.

*7. Create the table that would result from an Equijoin of PUBLISHER-join-BOOK.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| PUBLISHER.PUB\_ID | PUB\_NAME | PUB\_STATE | BOOK.PUB\_ID | BOOK\_ID | BOOK\_TITLE | BOOK\_COST |
| P1 | Bent Printers | TN | P1 | 15 | Cuddly Cats | 14.95 |
| P1 | Bent Printers | TN | P1 | 16 | Dangerous Dogs | 21.49 |
| P4 | Gumshoe Publishers | AR | P4 | 17 | Cute Puppies | 25.95 |
| P3 | Slick Prints | TN | P3 | 20 | Killer Cats | 35.99 |

*8. Create the table that would result from a RIGHT Outer Join of SIGNING-join-AUTHOR.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| SIGN\_ID | SIGN\_CITY | SIGN\_STATE | SIGNING.AU\_ID | AUTHOR.AU\_ID | AU\_LNAME | AU\_FNAME |
| 10 | Kensington | AL | 223 | 223 | Pilsner | Mahir |
| 11 | Brighton | FL | 223 | 223 | Pilsner | Mahir |
| 12 | Nashville | TN | 230 | 230 | Patel | Raj |
| 15 | Cornish | TN | 226 | 226 | Carter | Lilly |
| 10 | Brighton | FL | 220 | 220 | Milton | James |
|  |  |  |  | 228 | Patel | Mohammad |
|  |  |  |  | 231 | Marshall | Robbi |