CIS-310-01

Assignment 3

Chad Daily, Dalton Sacre, Robert Weedman, and Mason Wuest

P. 108 14, 16-17

14.) booth machine

|  |  |
| --- | --- |
| BOOTH\_PRODUCT | BOOTH\_PRICE |
| Chips | 1.25 |
| Chips | 1.5 |
| Cola | 1.25 |
| Chocolate Bar | 1 |
| Energy Drink | 2 |

16.) booth machine

|  |  |
| --- | --- |
| BOOTH\_PRODUCT | BOOTH\_PRICE |
| Energy Drink | 2 |

17.) machine – booth

|  |  |
| --- | --- |
| MACHINE\_PRODUCT | MACHINE\_PRICE |
| Chips | 1.25 |
| Chocolate Bar | 1 |

p. 112 17-22

|  |  |  |
| --- | --- | --- |
| **TABLE** | **PRIMARY KEY** | **FOREIGN KEY(S)** |
| TRUCK | TRUCK\_NUM | BASE\_CODE, TYPE\_CODE |
| BASE | BASE\_CODE | None |
| TYPE | TYPE\_CODE | None |

17.)

18.)

|  |  |  |
| --- | --- | --- |
| **TABLE** | **ENTITY INTEGRITY** | **EXPLANATION** |
| TRUCK | YES | All primary key values are unique and no null values exist |
| BASE | YES | All primary key values are unique and no null values exist |
| TYPE | YES | All primary key values are unique and no null values exist |

19.)

|  |  |  |
| --- | --- | --- |
| **TABLE** | **REFERENTIAL INTEGRITY** | **EXPLANATION** |
| TRUCK | YES | A foreign key attribute has a null value, but this is acceptable because it is not a part of its table’s primary key. TRUCK\_NUM 1004 may not have been assigned a BASE yet |
| BASE | YES | All non-null foreign key values reference existing primary key values |
| TYPE | YES | All non-null foreign key values reference existing primary key values |

20.) TRUCK\_SERIAL\_NUM is the TRUCK table’s candidate key

21.)

TRUCK table

superkey – TRUCK\_NUM

secondary key – TRUCK\_BUY\_DATE

BASE table

superkey – BASE\_CODE

secondary key – BASE\_PHONE

TYPE table

superkey – TYPE\_CODE

secondary key – TYPE\_DESCRIPTION

