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CIS 310

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Assignment 2

Part 1

1. UNION

|  |  |
| --- | --- |
| PRODUCT | PRICE |
| Chips | 1.5 |
| Cola | 1.25 |
| Energy Drink | 2 |
| Chips | 1.25 |
| Chocolate Bar | 1 |

1. INTERSECT

|  |  |
| --- | --- |
| PRODUCT | PRICE |
| Energy Drink | 2 |

1. MACHINE DIFFERENCE BOOTH

|  |  |
| --- | --- |
| PRODUCT | PRICE |
| Chips | 1.25 |
| Chocolate Bar | 1 |

Part 2

1. Identifying primary and foreign keys

|  |  |  |
| --- | --- | --- |
| Table | Primary Key | Foreign Key(s) |
| EMPLOYEE | EMP\_CODE | STORE\_CODE |
| STORE | STORE\_CODE | REGION\_CODE, EMP\_CODE |
| REGION | REGION\_CODE | N/A |

1. Entity integrity

|  |  |  |
| --- | --- | --- |
| Table | Entity Integrity | Explanation |
| EMPLOYEE | Yes | Each primary key (EMP\_CODE) value is unique and has no nulls |
| STORE | Yes | Each primary key (STORE\_CODE) value is unique and has no nulls |
| REGION | Yes | Each primary key (REGION\_CODE) value is unique and has no nulls |

1. Referential Integrity

|  |  |  |
| --- | --- | --- |
| Table | Entity Integrity | Explanation |
| EMPLOYEE | Yes | This table has a foreign key (STORE\_CODE) whose values matches those in the STORE table |
| STORE | Yes | This table has two foreign keys (REGION\_CODE, EMP\_CODE) whose values matches those in the REGION and EMPLOYEE tables |
| REGION | No | This table has no foreign keys |

Part 3

1. Business rules for relationships identified in part 2:
   1. A store can employ one or more employees
   2. An employee can work for one and only one store
   3. A region can have one or more stores
   4. A store can only be in one and only one region

Part 4

1. Visio ERD

Graphical user interface

Description automatically generated