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CIS 310-01

Assignment 4

1. **For each table, identify the primary key and the foreign key(s). If a table does not have a foreign key, write *None* in the space provided.**

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

1. **Do the tables exhibit entity integrity? Answer yes or no and then explain your answer.**

|  |  |  |
| --- | --- | --- |
| **TABLE** | **ENTITY INTEGRITY** | **EXPLANATION** |
| TRUCK | Yes | All PK values are unique. No key attributes in PK are null |
| BASE | Yes | All PK values are unique. No key attributes in PK are null |
| TYPE | Yes | All PK values are unique. No key attributes in PK are null |

1. **Do the tables exhibit referential integrity? Answer yes or no and then explain your answer. Write *NA* (Not Applicable) if the table does not have a foreign key.**

|  |  |  |
| --- | --- | --- |
| **TABLE** | **REFERENTIAL INTEGRITY** | **EXPLANATION** |
| TRUCK | Yes | Every entry in TYPE\_CODE and BASE\_CODE is either null or valid value |
| BASE | NA | No foreign key |
| TYPE | NA | No foreign key |

1. **Identify the TRUCK table’s candidate key(s).**

TRUCK\_SERIAL\_NUM

1. **For each table, identify a superkey and a secondary key.**

|  |  |  |
| --- | --- | --- |
| **TABLE** | **SUPERKEY** | **SECONDARY KEY** |
| TRUCK | TRUCK\_NUM, TRUCK\_SERIAL\_NUM, (TRUCK\_SERIAL\_NUM + any other attribute) | BASE\_CODE, TYPE\_CODE |
| BASE | BASE\_CODE, BASE\_AREA\_CODE | BASE\_AREA\_CODE |
| TYPE | TYPE\_CODE | None |