Emily Zeng

CIS 310-01

Professor Guan

February 22, 2017

Assignment 6

1. Dependency diagram

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| INV\_NUM | PROD\_NUM | SALE\_DATE | PROD\_LABEL | VEND\_CODE | VEND\_NAME | QUANT\_SOLD | PROD\_PRICE |

Partial dependency

Transitive dependency

Partial dependency

1. Table is in 1NF because there are no repeating groups and the PKs are defined.
2. 2NF – 1NF and no partial dependencies

|  |  |  |
| --- | --- | --- |
| **INV\_NUM** | **PROD\_NUM** | QUANT\_SOLD |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PROD\_NUM** | PROD\_LABEL | PROD\_PRICE | VEND\_CODE | VEND\_NAME |

|  |  |
| --- | --- |
| **INV\_NUM** | SALE\_DATE |

Transitive dependency

1. 3NF – 2NF and no transitive dependencies

|  |  |  |
| --- | --- | --- |
| **INV\_NUM** | **PROD\_NUM** | QUANT\_SOLD |

|  |  |  |  |
| --- | --- | --- | --- |
| **PROD\_NUM** | PROD\_LABEL | PROD\_PRICE | VEND\_CODE |

|  |  |
| --- | --- |
| **INV\_NUM** | SALE\_DATE |

|  |  |
| --- | --- |
| **VEND\_CODE** | VEND\_NAME |