Niloofar Gorjinejad

Rowan Brady

Task 6

Assignment B

**PARTIAL DEPENDECY**

{PROD\_NUM 🡪 PROD\_DESCRIPTION, PROD\_PRICE, VEND\_CODE, VEND\_NAME}

{INV\_NUM 🡪 SALE\_DATE}

INV\_NUM, PROD\_NUM 🡪 NUMBER\_SOLD}

**FUNCTIONAL DEPENDENCY**

{INV\_NUM 🡪 SALE\_DATE}

{PROD\_NUM 🡪 PROD\_DESCRIPTION, NUMBER\_SOLD, PROD\_PRICE, VEND\_CODE, PROD\_PRICE}

**TRANSITIVE DEPENDENCY**

{VEND\_CODE 🡪 VEND\_NAME}

1NF: The above relational scheme is already in 1NF – all values are atomic

2NF:

**INVOICE**

|  |  |
| --- | --- |
| INV\_NUM | SALE\_DATE |
| 12345 | 22\_JUL\_2020 |
| 12346 | 22\_JUL\_2020 |
| 12347 | 23\_JUL\_2020 |

**VENDOR**

|  |  |
| --- | --- |
| Vend\_CODE | VEND\_NAME |
| 502 | City Shop |
| 609 | COVID-19 Shop |
| 257 | Online Shop |

**ACCOUNT STATEMENT**

|  |  |  |
| --- | --- | --- |
| INV\_NUM | PRODUCT\_NUM | NUMBER\_SOLD |
| 12345 | EE-A3422Z | 5 |
| 12345 | AC-2002X | 6 |
| 12345 | SV-4534Y | 5 |
| 12346 | EE-A3422Z | 3 |
| 12347 | BC-7783P | 5 |

**PRODUCT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PRODUCT\_NUM | PROD\_DESCRIPTION | PROD\_PRICE | VEND\_CODE | VEND\_NAME |
| EE-A3422Z | Camera | $69.95 | 502 | City Shop |
| AC-2002X | Cable | $3.45 | 502 | City Shop |
| SV-4534Y | Keyboard | $39.99 | 609 | COVID-19 Shop |
| BC-7783P | Monitor | $87.75 | 257 | Online Shop |

**3NF – FINAL ANSWER:**

**INVOICE**

|  |  |
| --- | --- |
| INV\_NUM | SALE\_DATE |
| 12345 | 22\_JUL\_2020 |
| 12346 | 22\_JUL\_2020 |
| 12347 | 23\_JUL\_2020 |

**VENDOR**

|  |  |
| --- | --- |
| VEND\_CODE | VEND\_NAME |
| 502 | City Shop |
| 609 | COVID-19 Shop |
| 257 | Online Shop |

**ACCOUNT STATEMENT**

|  |  |  |
| --- | --- | --- |
| INV\_NUM | PRODUCT\_NUM | NUMBER\_SOLD |
| 12345 | EE-A3422Z | 5 |
| 12345 | AC-2002X | 6 |
| 12345 | SV-4534Y | 5 |
| 12346 | EE-A3422Z | 3 |
| 12347 | BC-7783P | 5 |

**PRODUCT**

|  |  |  |  |
| --- | --- | --- | --- |
| PRODUCT\_NUM | PROD\_DESCRIPTION | PROD\_PRICE | VEND\_CODE |
| EE-A3422Z | Camera | $69.95 | 502 |
| AC-2002X | Cable | $3.45 | 502 |
| SV-4534Y | Keyboard | $39.99 | 609 |
| BC-7783P | Monitor | $87.75 | 257 |