Compulsory task 1:

1. What is normalization?

Normalization is a process for evaluating and correcting table structures to minimize data redundancies and therefore reduce the likelihood of data anomalies.

1. When is a table in 1NF?

A table is in 1NF, when

* All the key attributes are defined
* There are no repeating groups in the table
* All attributes are dependent on the primary key

1. When is a table in 2NF?

A table is 2NF, when

* It is in 1NF
* It includes no partial dependencies
* No attribute dependent on only a portion of the primary key

1. When is a table in 3NF?

A table is 3NF, when

* It is in 2NF
* It contains no transitive dependencies

5.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Inv\_num | Prod\_num | Sale\_date | Prod\_label | Vend\_code | Vend\_name | Quant\_sold | Prod\_price |

|  |  |
| --- | --- |
| Vend\_code(pk) | Vend\_name |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Inv\_num(pk) | Prod\_num(FK) | Sale\_date | Vend\_code(FK) | Quant\_sold |

6..

|  |  |  |
| --- | --- | --- |
| Prod\_num(pk) | Prod\_label | Prod\_price |

Table:Vendor

Table: Product

Table:Invoice