

Normalization

Database-Project



Normalization: Blood Bank

**Blood:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **D\_id** | Name | Age | sex | Address | Contact\_no | Blood\_group | **I\_no** | Blood\_type | Orders | Date | Cost | Description |

**1NF:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **D\_id** | D\_Name | Age | sex | D\_Address | Contact\_no | Blood\_group | **I\_no** | Blood\_type | Orders | Date | Cost | Description |

**D\_id , I\_no** → D\_name , age, Sex, D\_Address, Contact\_no, Blood\_group, Blood\_type, Orders, Date, Cost, Description

**D\_id** →D\_name , age, Sex, D\_Address, Contact\_no, Blood\_group

**I\_no** →, Blood\_type, Orders, Date, Cost, Description

**2NF:**

**Donor:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **D\_id** | D\_Name | Age | sex | D\_Address | Contact\_no | Blood\_group |

**Blood\_inventory:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **I\_no** | Blood\_type | Orders | Date | Cost | Description |

**D\_Info:**

|  |  |
| --- | --- |
| D\_id | **I\_no** |

**3NF:**

**Donor:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **D\_id** | D\_Name | Age | sex | D\_Address | Contact\_no | Blood\_group |

**Blood\_inventory:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **I\_no** | Blood\_type | Orders | Date | Cost | Description |

**D\_Info:**

|  |  |
| --- | --- |
| D\_id | **I\_no** |

**Manages:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **I\_no** | Blood\_type | Orders | Date | Cost | Description | **In\_id** | name | Address | Phone\_number | Email\_address |

**1NF:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **I\_no** | Blood\_type | Orders | Date | Cost | Description | **In\_id** | In\_name | M\_Address | Phone\_number | Email\_address |

I\_no, In\_id → Blood\_type, Orders, Date, Cost, Description, Name, M\_Address, Phone\_number, Email\_address

I\_no→ Blood\_type, Orders, Date, Cost, Description

In\_id → In\_name,M\_Address, Phone\_number, Email\_address

**2NF:**

**Blood\_Inventory:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **I\_no** | Blood\_type | Orders | Date | Cost | Description | **In\_id** |

**Inventory\_Manager:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **In\_id** | In\_name | M\_Address | Phone\_number | Email\_address |

**3NF:**

**Blood\_Inventory:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **I\_no** | Blood\_type | Orders | Date | Cost | Description | **In\_id** |

**Inventory\_Manager:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **In\_id** | In\_name | M\_Address | Phone\_number | Email\_address |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **I\_no** | Blood\_type | Orders | Date | cost | Description | Hos\_Name | Address | Fax | Telephone |

**Orders:**

**1NF:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **I\_no** | Blood\_type | Orders | Date | cost | Description | **Hos\_id** | Hos\_Name | Hos\_Address | Fax | Telephone |

**I\_no,Hos\_id**→Blood\_type,Orders,Date,cost,Description, Hos\_Name, Hos\_Address,Fax,Telephone

**I\_no** →Blood\_type,Orders,Date,cost,Description

**Hos\_id**→Hos\_Name, Hos\_Address,Fax,Telephone

**2NF:**

**Blood\_Inventory:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **I\_no** | Blood\_type | Orders | Date | cost | Description |

**Hospital:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Hos\_id** | Hos\_Name | Hos\_Address | Fax | Telephone | **I\_no** |

**3NF:**

**Blood\_Inventory:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **I\_no** | Blood\_type | Orders | Date | cost | Description |

**Hospital:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Hos\_id** | Hos\_Name | Hos\_Address | Fax | Telephone | **I\_no** |

**Registers:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **D\_id** | name | Age | Sex | Address | Contact\_no | Blood\_group | name | Address | Contact\_no |

**1NF:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **D\_id** | D\_name | Age | Sex | D\_Address | Contact\_no | Blood\_group | **Recp\_id** | Recp\_name | Recp\_Address | Contact\_no |

**D\_id**, **Recp\_id**→ D\_name,Age,Sex,D\_Address,Contact\_no,Blood\_group,Recp\_name, Recp\_Address,Contact\_no

**D\_id**→ D\_name,Age,Sex,D\_Address,Contact\_no,Blood\_group

**Recp\_id**→Recp\_name,Recp\_Address,Contact\_no

**2NF:**

**Donor:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **D\_id** | D\_name | Age | Sex | D\_Address | Contact\_no | Blood\_group |

**Receptionist:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Recp\_id** | Recp\_name | Recp\_Address | Contact\_no | **D\_id** |

**3NF:**

**Donor:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **D\_id** | D\_name | Age | Sex | D\_Address | Contact\_no | Blood\_group |

**Receptionist:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Recp\_id** | Recp\_name | Recp\_Address | Contact\_no | **D\_id** |