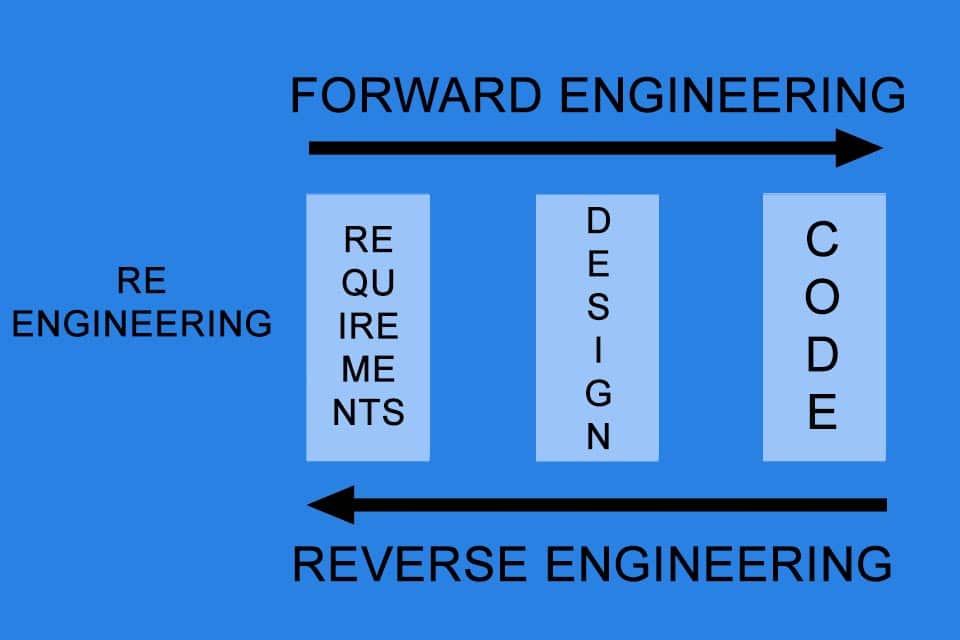
**SQL\_Reverse Engineering**

**Reverse-engineering** is the act of dismantling an object or process to see how it works. It is done primarily to analyze and gain knowledge about the way something works but often is used to duplicate or enhance the object.



* **SQL Reverse Engineering:**

Database reverse engineering is the process that involves obtaining a database schema through its implementation, that is, through the definition of its objects.

**SQL Script**

**Model (ERD)**

1. **Let’s perform SQL reverse engineering by creating a SQL Script and converting it into an ERD model.**

|  |
| --- |
| Ward |
| Ward\_No |
| Floor |
| Nurses |
| Beds |

Schema –

|  |
| --- |
| Patient |
| ID |
| Name |
| DOB |
| Address |
| Doctor\_ID |
| visit\_date |

|  |
| --- |
| Doctor |
| Doctor\_ID |
| Doctor\_name |
| Specialization |
| Ward\_No |
| Salary |

Sql script: create database reverse;

use reverse;

create table ward(ward\_no int primary key,floor int,nurses int,bed int);

create table doctor(doctor\_id int primary key,doctor\_name varchar(40),specilaisation varchar(40),ward\_no int ,salary int,foreign key (ward\_no) references ward (ward\_no));

create table patient (id int primary key,name varchar(30),dob date ,address varchar(40),doctor\_id int,visit\_date date,foreign key (doctor\_id) references doctor (doctor\_id));

er model:

so we can say each doctor can handle multiple patients and each ward can have many doctors.so one to many relationship is shown in below er model.

