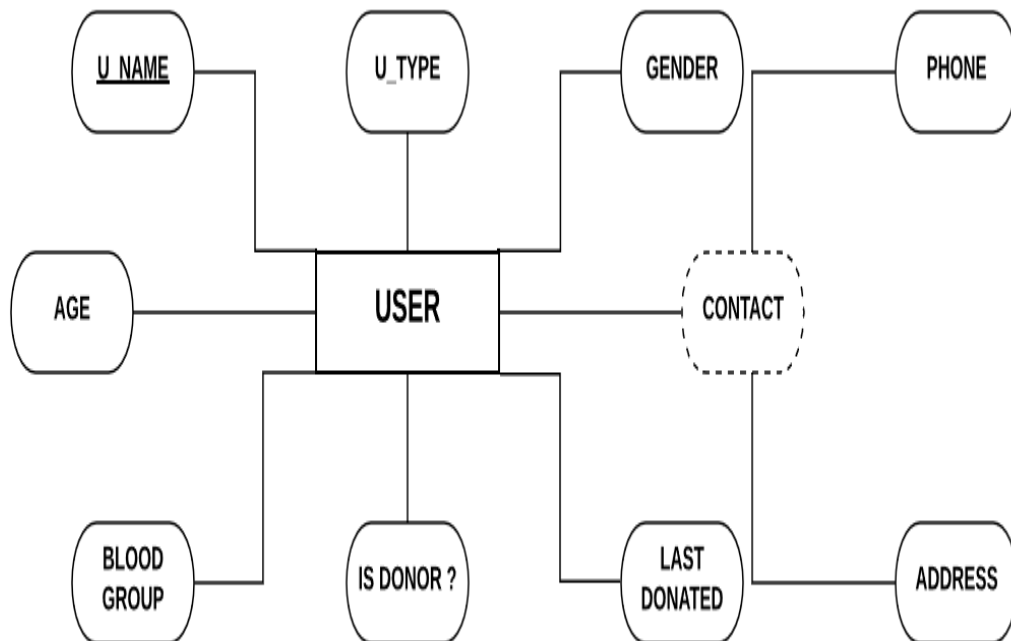
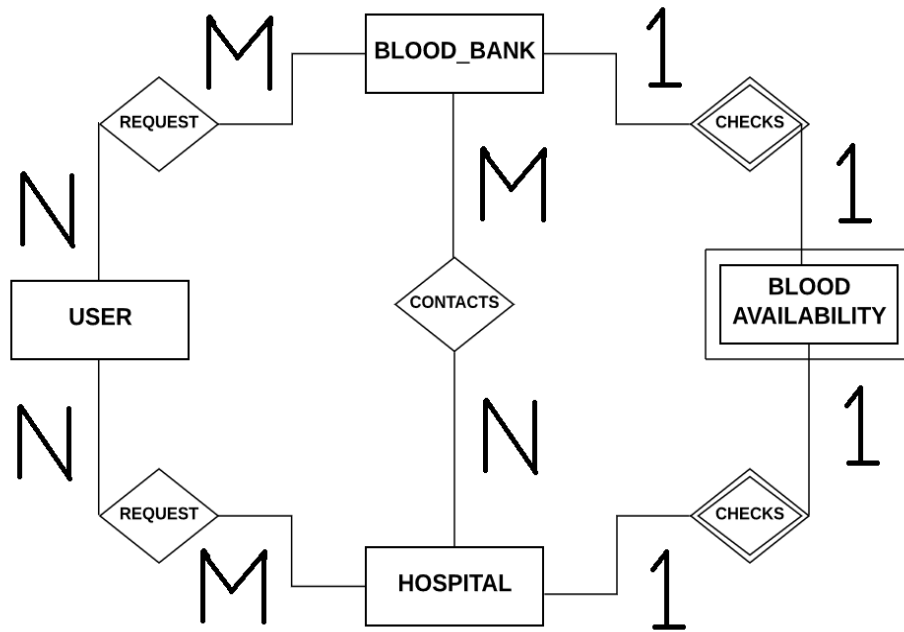
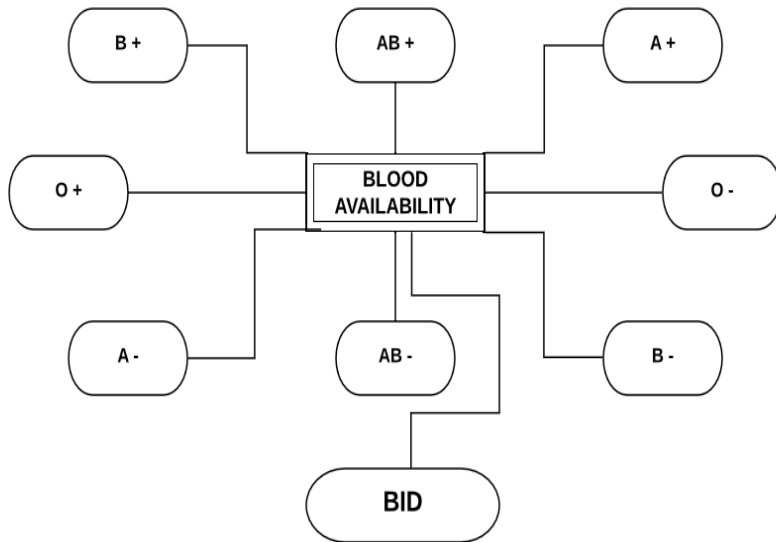
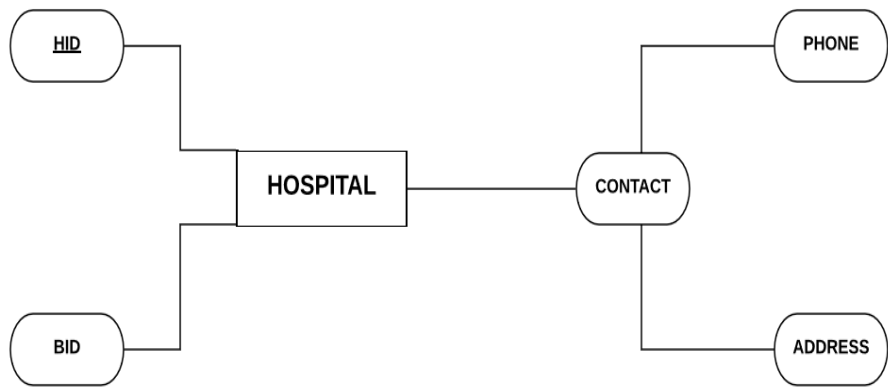
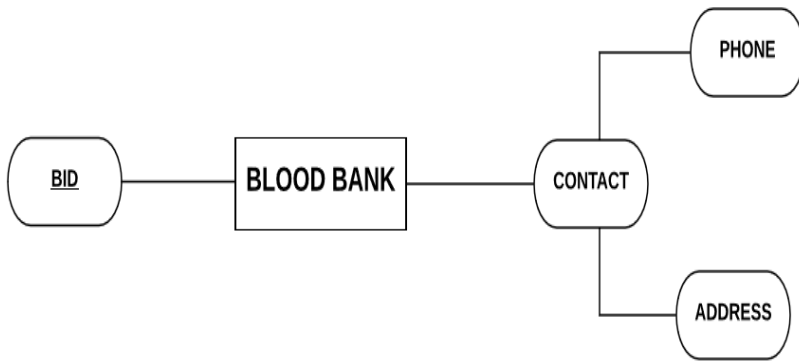


ER Diagram & Relational Schema:





USER (U_NAME, U_TYPE, CONTACT, DOB, GENDER, BLOOD_GROUP, LAST DONATED)

BLOOD BANK (BID, CONTACT)

HOSPITAL (HID, BID, CONTACT)

CONTACT (PHONE, ADDRESS)

BLOOD AVAILABILITY (BID, A+, A-, B+, B-, AB+, AB-, O+, O-)

EXPLANATION:

1. Consider here Users as only Donors, only Hospitals or Blood Banks can request Blood from Donors when it's required.
2. The Cardinality ratio between Blood Bank and User is M : N because any Blood Bank can request any number of Users and similarly any User can Donate to any Number of Blood Banks.
3. The Cardinality ratio between Hospital and User is M : N because any Hospital can request any number of Users and similarly any User can Donate to any Number of Hospitals.
4. The Cardinality ratio between Blood Availability and Blood Bank is 1 : 1 because any Blood Bank can check Blood Availability of its own and similarly Blood Availability can give info regarding the respective Blood Bank.
5. The Cardinality ratio between Blood Availability and Hospital is 1 : 1 because any Hospital can check Blood Availability of its own and similarly Blood Availability can give info regarding the respective Hospital.
6. The Cardinality ratio between Blood Bank and Hospital is M : N because any Hospital can request any number of Blood Banks for Blood and similarly any Blood Bank can request to any Number of Hospitals.