◆ UNF (Unnormalized Form)

Example of unstructured data before applying any normalization:

BloodBank_ID	BloodBank_Name	Contact	Email	Address
1	Dhaka Blood Bank	01811123456	dhaka.bloodbank@gmail.com	House 15, Road 5, Dhanmondi, Dhaka, 1209
2	Chittagong Blood Bank	01822223456	chattogram.bloodbank@gmail.com	House 8, Road 12, Panchlaish, Chattogram, 4000

Employees (ID, Name, Contact, Email, NID)	Donors (ID, Name, Blood Type, Contact, Email, NID)	Patients (ID, Name, Blood Type, Contact, Email, Hospital)
(1, Shakil Ahmed, 01712345678, shakil000@gmail.com, 123456789)	(1, Rashedul Islam, O+, 01768234567, rashed101@gmail.com, 111223344)	(1, Jahidul Hasan, A+, 01711234567, Dhaka Medical)
(2, Rina Sultana, 01722345678, rina111@gmail.com, 223456789)	(2, Jannatul Ferdous, A+, 01778234567, jannat202@gmail.com, 112233445)	(2, Sharmin Akter, O+, 01721234567, Chittagong Medical)

🔴 **Issues:**

- Repeating groups (multiple employees, donors, and patients stored in a single row).
- Multiple values in a single field.
- No clear separation of entities.

✅ 1NF (First Normal Form)

- **Remove repeating groups** by ensuring each column contains **atomic** values.
- Create separate tables for **employees, donors, and patients**.

BloodBank Table (1NF)

BloodBank_ID	Name	Contact	Email	Address	City	State	ZIP
1	Dhaka Blood Bank	01811123456	dhaka.bloodbank@gmail.com	House 15, Road 5	Dhanmondi	Dhaka	1209
2	Chittagong Blood Bank	01822223456	chattogram.bloodbank@gmail.com	House 8, Road 12	Panchlaish	Chattogram	4000

Employee Table (1NF)

Employee_ID	Name	Contact	Email	NID	BloodBank_ID (FK)
1	Shakil Ahmed	01712345678	shakil000@gmail.com	123456789	1
2	Rina Sultana	01722345678	rina111@gmail.com	223456789	2

Donor Table (1NF)

Donor_ID	Name	Blood_Type	Contact	Email	NID	City	State	ZIP
1	Rashedul Islam	O+	01768234567	rashed101@gmail.com	111223344	Mirpur	Dhaka	1216
2	Jannatul Ferdous	A+	01778234567	jannat202@gmail.com	112233445	Panchlaish	Chattogram	4000