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Normalization Assignment

Q 1:

Inventory (Item_ID, Item_Label, Room_No, BLDG_code, BLDG_name, BLDG_Manager)

DEPENDENCIES

TRANSITIVE DEPENDENCIES:

Item_ID → BLDG_Code → BLDG_Name, BLDG_Manager

Seeded Schema :

TABLE # 1

(ITEM)

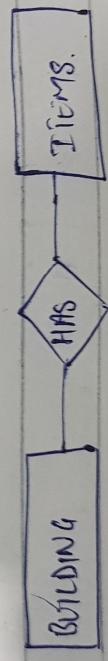
Item (Item_ID, Item_Label, Room_no, BLDG_code)

TABLE # 2

(BUILDING)

BLDG (BLDG_Code, BLDG_Name, BLDG_Manager)

ERD



Q2:

Patients and medicine & prescription

The problem is partial dependency

Patient ID → Patient Name

Medicine → Dose, shelf life

Solution:

Prescription (Medicine, Patient ID, Date, Refills)

Patient (Patient ID, Patient Name)

Medicine (Medicine, Dose, Shelf life)

Q3:

Transitive dependency

EMP No → Dept code → Dept name, Dept Manager

Multivalued attributes

EMP dependencies, EMP training.

Solution :

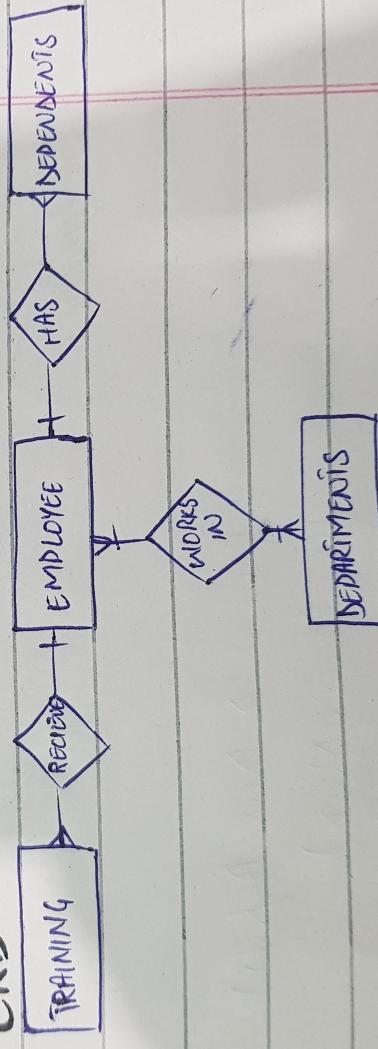
~~Employee (Emp_ID, Emp_Name, Emp_Edu, Job_Class,
Depd_code (F.K), Emp_Job, Emp_DOB,
Emp_HireDate, Emp_BasicSalary, Emp_CommissionRate)~~

~~Depd (Depd_Code, Depd_Name, Depd_Manager)~~

~~Depd (Depd_ID, Emp_No (F.K), Depd_Name,
Relationship)~~

~~Training (Emp_no (F.K) , Training_code)~~

ERD :



<u>consul class</u>	<u>Client No.</u>	<u>Client name</u>	<u>Client Region</u>	<u>Contract no.</u>	<u>Contract date</u>	<u>Contract amount</u>	<u>Consultant no.</u>	<u>Consultant name</u>	<u>Consultant Region</u>
<u>Client</u>				<u>Contract</u>					
	<u>Client no.</u>	<u>Client name</u>	<u>Client Region</u>		<u>Contract no.</u>	<u>Contract amount</u>	<u>Contract date</u>		
<u>consultants</u>				<u>consult class</u>					
	<u>Consultant no.</u>	<u>Consultant name</u>	<u>Consultant Region</u>				<u>Consultant no.</u>	<u>Class no.</u>	

Client no → Client name, Region

Contract no → Contract amount, contract date

Consultant no. → Consultant name, Consultant region

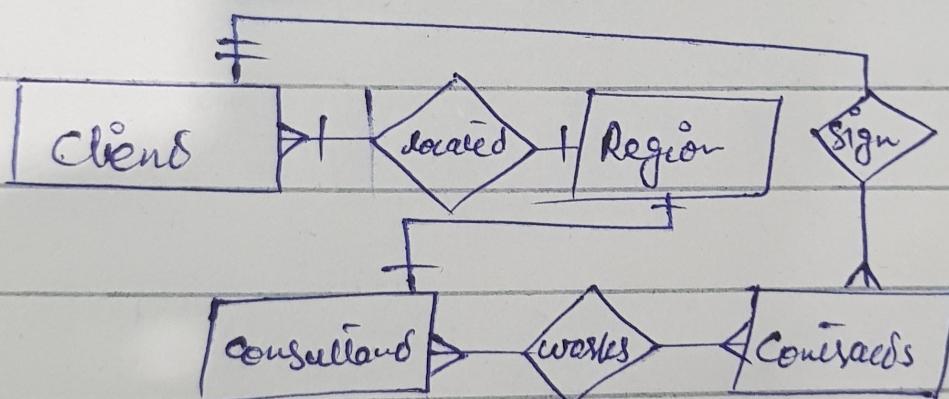
consul no → consultant no, consul no.

Ex 15

Cons_id	Cons_name	Conf_id	Clien ^t Region	client_id	client_name	Conf_date	Conf_class	Consultants Region
Consultants							authenticat ^{ion}	
Consultants id	Consultants name	Consultants Region		client_id	client_name	Clien ^t Region		Conf_id

Contracts

consultants_id	client_id	conf_id	conf_name	conf_date	Contract Region close ^{attenuation}



Consultants id → cons. name, Consultants region

Contracts id → Cons. ID , Client id, conf date, conf. class

Client id → Client name, Client region