02) Suggest a new database design to hadle the new situation.

computer (computer Nbr, Manufacturer, cost)

staff - computer (staff Nbr, computer Nbr)

Question 02

An agency called istant cover supplies part-time / temporary staff to hotels within scotland. The table shows sample data, which lists the time spent by agency staff working at variou hotels. The Nationi Insurance Number (NIN) is unique for every member of the staff

Partial Dependency

NIN	Contact NO	hours	eName	hno	hLOC
1135	C 1024	16	SmithJ	H25	East kilbride
1057	C 1024	24	HocineD	H25	East kibride
1068	C 1025	28	white T	H4	Glasglow
1135	C 1025	15	Smith T	H4	Glasglow

Full dependancy

Full dependancy

transitive dependancy

1) Identify the functional dependacies represanted by the attributes shown in the table. State any assumption you make about the data and the attributes shown in this table

2) Describe and illustrate the process of normalizing the table of 3NF. Identify primary and forign keys in your relations.

1NF

NIN	Contact NO	hours	ename	hno	hLoc

2NF

emp table

NIN	ename

contract

NIN	Contractno.	hours	hno	hLoc

3NF

emptable

NIN	ename

contract

NIN	contract NO.	hours

hotel

hno	hLoc

contract - hotel

contract NO	hno

Lab sheet 08

Question 01

Each member of staff in ABC company is allocated a single computer. Information about computers belonging to staff member is planned to be stored in a data base consisting of the following table.

Has computer (staff Nbr, Computer Nbr, Manufacturer, cost)

Company policy subsequetly changes, and some staff are allocated more than one computer (Each computer is still assigned to a single member of staff ?

01) Explain why the above table design is not suitable for ABC company
Because that want to be an atomic (remove multivalued)

1 NF - To be atomic

2 NF - Partial and full dependancy

3 NF - Transitive dependancy

1 NF

Staff NO.	Computer NO.	Manufacture	cost

2 NF

Computer NO.	Manufacturer	Cost

Staff Nbr	Computer Nbr

3NF ⟶ same