

Below is hospital data on staff rotation. Assume that the staff can change wards in one week. The charge nurse is unique from the regular staff. Normalize the table below into its 3rd normal form. Show all your solutions.

Staff No.	Name	Address	Tel No.	Position	Shift	Ward No.	Ward Name	Location	Week beginning	Charge Nurse	Charge Nurse No.	Tel Extn.
S123	Morgan Russell	23A George Street	01506-67676	Nurse	Late				-			
S098	Carol Cummings	15 High Street Edinburgh	0131-334-5677	Staff Nurse	Late	Ward 11	Orthopaedic	Block E	1/9/1998	Maira Samuel	S011	7711

Solution:

1NF

<u>Staff No.</u>	Name	Address	Tel No.	Position	Shift	<u>Ward No.</u>	Ward Name	Location	Week beginning	Charge Nurse	Charge Nurse No.	Tel Extn.
S123	Morgan Russell	23A George Street	01506-67676	Nurse	Late	Ward11	Orthopaedic	Block E	1/9/1998	Maira Samuel	S011	7711
S098	Carol Cummings	15 High Street Edinburgh	0131-334-5677	Staff Nurse	Late	Ward 11	Orthopaedic	Block E	1/9/1998	Maira Samuel	S011	7711

2NF

<u>Staff No.</u>	<u>Ward No.</u>	Week beginning		Shift
S123	Ward 11	Address	Tel No.	Position
S098	Ward 11	23A	1/9/1998	Nurse Late
	Morgan Russell	George Street	01506-67676	
S098	Carol Cummings	15 High Street	0131-334-5677	Staff Nurse

3NF

<u>Staff No.</u>	<u>Ward No.</u>	Week beginning	Shift
S123	Ward 11	1/9/1998	Late
S098	Ward 11	1/9/1998	Late

<u>Staff No.</u>	Name	Address	Tel No.	Position
S123	Morgan Russell	23A George Street	01506-67676	Nurse
S098	Carol Cummings	15 High Street	0131-334-5677	Staff Nurse

<u>Ward No.</u>	Ward Name	Location	Charge Nurse	Charge Nurse No.	Tel Extn.
Ward 11	Orthopaedic	Block E	Moir Samuel	S011	7711

<u>Ward No.</u>	Ward Name	Location	Tel Extn.	Charge Nurse No.
Ward 11	Orthopaedic	Block E	7711	S011

<u>Charge Nurse No.</u>	Charge Nurse
S011	Moir Samuel