

Q1

**Dream Home** Company is designed to facilitate connecting people who are interested in properties renting and the owners of these properties. Note that 'Rent' is the value of the property cost, which is determined by the negotiation between the customer and the owner.

Use the below data to reach the 3<sup>rd</sup> Normal Form. Show your answer steps. Start with Customer number as a PK. Ignore Page number and Date mentioned in the below bill.

Page 1		<b>DreamHome</b> Customer Rental Details				Date 7-Oct-98	
Customer Name John Kay				Customer Number CR76			
Property Number	Property Address	Rent Start	Rent Finish	Rent	Owner Number	Owner Name	
PG4	6 Lawrence St, Glasgow	1-Jul-94	31-Aug-96	350	CO40	Tina Murphy	
PG16	5 Novar Dr, Glasgow	1-Sep-96	1-Sep-98	450	CO93	Tony Shaw	

Customer_RentalTable								
Customer_No	CName	Property_No	PAddress	RentStart	RentFinish	Rent	Owner_No	OName
CR76	John Kay	PG4	6 Lawrence St, Glasgow	1-Jul-94	31-Aug-96	350	CO40	Tina Murphy
		PG16	5 Novar Dr, Glasgow	1-Sep-96	1-Sep-98	450	CO93	Tony Shaw
CR56	Aline Stewart	PG4	6 Lawrence St, Glasgow	1-Sep-92	10-June-94	350	CO40	Tina Murphy
		PG36	2 Manor Rd, Glasgow	10-Oct-94	1-Dec-95	375	CO93	Tony Shaw
		PG16	5 Novar Dr, Glasgow	1-Jan-96	10-Aug-96	450	CO93	Tony Shaw

Q2

TABLE  
5.1 A Sample Report Layout

PROJ. NUM.	PROJECT NAME	EMPLOYEE NUMBER	EMPLOYEE NAME	JOB CLASS.	CHG/ HOUR	HOURS BILLED	TOTAL CHARGE
15	Evergreen	103	June E. Arbough	Elec. Engineer	\$ 83.30	23.8	\$ 2,011.10
		101	John G. News	Database Designer	\$105.00	19.4	\$ 2,037.00
		105	Alice K. Johnson*	Database Designer	\$105.00	35.7	\$ 3,748.50
		106	William Smithfield	Programmer	\$ 35.75	12.6	\$ 450.45
		102	David H. Senior	Systems Analyst	\$ 96.75	23.8	\$ 2,302.65
				<b>Subtotal</b>			<b>\$10,549.70</b>
18	Amber Wave	114	Annelise Jones	Applications Designer	\$ 48.10	25.6	\$ 1,183.26
		118	James J. Frommer	General Support	\$ 18.36	45.3	\$ 831.71
		104	Anne K. Ramoras*	Systems Analyst	\$ 96.75	32.4	\$ 3,135.70
		112	Darlene M. Smithson	DSS Analyst	\$ 45.95	45.0	\$ 2,021.80
				<b>Subtotal</b>			<b>\$ 7,172.47</b>
22	Rolling Tide	105	Alice K. Johnson	Database Designer	\$105.00	65.7	\$ 6,793.50
		104	Anne K. Ramoras	Systems Analyst	\$ 96.75	48.4	\$ 4,682.70
		113	Delbert K. Joenbrood*	Applications Designer	\$ 48.10	23.6	\$ 1,135.16
		111	Geoff B. Wahash	Clerical Support	\$ 26.87	22.0	\$ 591.14
		106	William Smithfield	Programmer	\$ 35.75	12.8	\$ 457.60
				<b>Subtotal</b>			<b>\$13,660.10</b>
25	Starlight	107	Maria D. Alonzo	Programmer	\$ 35.75	25.6	\$ 879.43
		115	Travis B. Bawangi	Systems Analyst	\$ 96.75	45.8	\$ 4,431.15
		101	John G. News*	Database Designer	\$105.00	56.3	\$ 5,911.50
		114	Annelise Jones	Applications Designer	\$ 48.10	33.1	\$ 1,592.11
		108	Ralph B. Washington	Systems Analyst	\$ 96.75	23.6	\$ 2,283.30
		118	James J. Frommer	General Support	\$ 18.36	30.5	\$ 559.98
		112	Darlene M. Smithson	DSS Analyst	\$ 45.95	41.4	\$ 1,902.33
				<b>Subtotal</b>			<b>\$17,559.82</b>
				<b>Total</b>			<b>\$48,942.09</b>

Note: \* indicates project leader.