

BCNF or not ?

For relation Customer_details, following are functional dependencies:-

<u>Functional Dependencies</u>	<u>BCNF?</u>	<u>Reason</u>
Verification_ID → Name	BCNF	Verification_ID is super-key (key).
Verification_ID → Email	BCNF	Verification_ID is super-key (key).
Verification_ID → age	BCNF	Verification_ID is super-key (key).
Verification_ID → gender	BCNF	Verification_ID is super-key (key).
Verification_ID → Address	BCNF	Verification_ID is super-key (key).
Verification_ID → Budget	BCNF	Verification_ID is super-key (key).
Verification_ID → City	BCNF	Verification_ID is super-key (key).
Verification_ID → Type_of_customer	BCNF	Verification_ID is super-key (key).

For relation login_details, following are functional dependencies:-

<u>Functional Dependencies</u>	<u>BCNF?</u>	<u>Reason</u>
{Login_ID, Verification_ID} → Password	BCNF	{Login_ID, Verification_ID} is super-key (key).
{Login_ID, Verification_ID} → Contact_no	BCNF	{Login_ID, Verification_ID} is super-key (key).

For relation property, following are functional dependencies:-

<u>Functional Dependencies</u>	<u>BCNF?</u>	<u>Reason</u>
Property_ID → Property_name	BCNF	Property_ID is super-key (key).
Property_ID → Location	BCNF	Property_ID is super-key (key).
Property_ID → Owner_ID	BCNF	Property_ID is super-key (key).
Property_ID → Construction_status	BCNF	Property_ID is super-key (key).
Property_ID → Booking_status	BCNF	Property_ID is super-key (key).

For relation booking_details, following are functional dependencies:-

<u>Functional Dependencies</u>	<u>BCNF?</u>	<u>Reason</u>
Booking_ID \rightarrow Property_ID	BCNF	Booking_ID is super-key (key).
Booking_ID \rightarrow Buyer_ID	BCNF	Booking_ID is super-key (key).
Booking_ID \rightarrow Seller_ID	BCNF	Booking_ID is super-key (key).
Booking_ID \rightarrow Date	BCNF	Booking_ID is super-key (key).
Booking_ID \rightarrow Sell_price	BCNF	Booking_ID is super-key (key).

For relation Property_type, following are functional dependencies:-

<u>Functional Dependencies</u>	<u>BCNF?</u>	<u>Reason</u>
{Property_ID, Type, Sales_type} \rightarrow Amount	BCNF	{Property_ID, Type, Sales_type} is super-key.
{Property_ID, Type, Sales_type} \rightarrow Contract_type	BCNF	{Property_ID, Type, Sales_type} is super-key.
{Property_ID, Type, Sales_type} \rightarrow BHK	BCNF	{Property_ID, Type, Sales_type} is super-key.
{Property_ID, Type, Sales_type} \rightarrow Carpet_area	BCNF	{Property_ID, Type, Sales_type} is super-key.
{Property_ID, Type, Sales_type} \rightarrow Floor	BCNF	{Property_ID, Type, Sales_type} is super-key.
{Property_ID, Type, Sales_type} \rightarrow Residential?	BCNF	{Property_ID, Type, Sales_type} is super-key.

For relation Feedback, following are functional dependencies:-

<u>Functional Dependencies</u>	<u>BCNF?</u>	<u>Reason</u>
Feedback_ID \rightarrow Property_ID	BCNF	Feedback_ID is super-key (key).
Feedback_ID \rightarrow Respondent	BCNF	Feedback_ID is super-key (key).
Feedback_ID \rightarrow Ratings	BCNF	Feedback_ID is super-key (key).
Feedback_ID \rightarrow Description	BCNF	Feedback_ID is super-key (key).