Q. Prepare an example that demonstrates the use of normal models, abstract models, and transient models.

ANS:-
1.Normal Model:-

It directly saves data in a database table.

Example: Order management system
Fields:-
order_number
customer_name
order_date
total_amount

2.Abstract Model:-

It helps us to share common things between multiple models without storing data directly. we can't save data using just the abstract model. Instead, other models use it to save data.

Example:
Order management system, we may need to handle different payment methods such as Credit Card, Cash, or Bank Transfer. These payment methods share some common properties, like payment_amount, payment_date, and payment_status, but they also have specific details (e.g., card_number for Credit Card, bank_account for Bank Transfer.

Instead of defining common fields in each payment method model, we create an abstract model called PaymentMethod. This abstract model contains the shared fields and methods, and other models like CreditCardPayment, CashPayment, and BankTransferPayment can inherit it and define their own unique fields.

Abstract Model PaymentMethod:
payment_amount: Amount of the payment.
payment_date: Date when the payment was made.
payment_status: Status of the payment (e.g., pending, completed)

[Abstraction : Abstraction is a concept that hides complex details and shows only the essential features of an object. Think of it as a way to simplify complex systems by showing only what is necessary, without getting into the messy, technical details.]

3.Transient Model:-

A transient model is for temporary or one-time data. It's like when you use a form for a short time and don't want to save the data forever. Once you're done with the data, it disappears.

Example:-
Fields:-
order_number
refund_amount
reason_for_refund