

Feature	Null Meaning	Zero Meaning	Description
day	No null value	No zero value	The number of days passed from the origin day. (60 days)
product_id	No null value	No zero value	
cat_name	No null value	No zero value	There are 5 categories of products in our data.
leaf_cat_id	No null value	No zero value	Each category has multiple leaf categories
live_rate	No null value	No zero value	Day proportion which a product is for sale at website.
product_sat_score	No one has rated.	No zero value	Users' satisfaction score mean between 1 to 5.
product_sat_count	No null value	No one has rated.	Users' satisfaction scores count.
amazing_day_rate	There is no Amazing sale.	There is no Amazing sale.	Day proportion which a product is for Amazing sale at website.
amazing_price_segment	There is no Amazing sale.	There is no Amazing sale.	Each segment is for a price range. It doesn't start from zero.
amazing_discount	There is no Amazing sale.	There is no Amazing sale.	Discount value for the product.
amazing_order_limit	There is no Amazing sale.	No zero value	Limitation on products count which each user can buy.
amazing_proposed_stock	There is no Amazing sale.	No zero value	Number of stocks which is proposed to be sold on the Amazing.
promotion_day_rate	There is no promotion sale.	There is no promotion sale.	Day proportion which a product is for promotion sale at website.
promotion_price_segment	There is no promotion sale.	There is no promotion sale.	Each segment is for a price range. It doesn't start from zero.
promotion_discount	There is no Promotion sale.	There is no Promotion sale.	Discount value for the product.
promotion_order_limit	There is no Promotion sale.	There is no Promotion sale.	Limitation on products count which each user can buy.

promotion_proposed_stock	There is no Promotion sale.	There is no Promotion sale.	Number of stocks which is proposed to be sold on the promotion.
comments_counts_7	No one has commented.	There is no zero value.	Number of users' comments for that product in last 7 days.
rec_comments_count_7	No one has recommended.	No one has recommended.	Number of users' recommendation for that product.
dkp_amazing_notif_count_7	No one has asked.	No one has asked.	Number of users' who asked for Amazing notification for that product in last 7 days.
normal_order_limit	There is no normal sale.	There is no normal sale.	Limitation on products count which each user can buy.
normal_price_segment	There is no normal sale.	No zero value	Each segment is for a price range. It doesn't start from zero in last 7 days.
normal_discount	There is no normal sale.	There is no normal sale.	Maybe there is a sale with discount out of promotion.
holiday	No null value	No null value	0.1, 0.2, 1 There are just 3 values.
warehouse1_share	There is no sale for that warehouse.	There is no sale for that warehouse.	It is a coefficient which shows the warehouse sales share.
warehouse2_share	There is no sale for that warehouse.	There is no sale for that warehouse.	It is a coefficient which shows the warehouse sales share.
amazing_sold_count	Zero sales count.	No zero value	Amazing sold count
promotion_sold_count	Zero sales count.	No zero value	Promotion sold count
normal_sold_count	Zero sales count.	No zero value	Normal sold count

The 60 days sales history data of about 5000 **Digikala's** products have been proposed (Train Dataset). As it is explained in the table, the data contains 29 columns. One of the classic problems of retail businesses is to predict the future daily sales for each product.

You are asked to design and implement a machine learning model which predicts the next 30 days' daily sales count of each product for Amazing, promotion, and Normal sales based on the previous 30 days' sales history data. Also, we want you to predict two warehouses share coefficient which specifies each warehouse sales count. (Predict red cells)

As the final answer, you have to run your model for about 2040 products (Test Dataset) to predict their next 30 days daily sales count (Amazing, promotion, Normal) and the warehouse's share coefficient based on their previous 30 days sales history data. Your final answer should be a CSV file

that just contains 'day' (31 to 60), 'product_id', 'warehouse1_share', 'warehouse2_share', 'amazing_sold_count', 'promotion_sold_count', 'normal_sold_count'. It will check with a machine, so mind the structure (Fill -1 values).