Internship Task 1: Pizza Sales Big Data Analysis

# Introduction

This report summarizes the analysis of a large dataset of pizza sales using PySpark. The objective was to apply big data tools to generate business insights such as key performance indicators (KPIs), trends, and top/bottom performers in terms of revenue, orders, and quantity.

# Dataset Description

The dataset used contains transactional data related to pizza sales, including fields like order\_id, order\_date, pizza\_name, pizza\_category, pizza\_size, quantity, and total\_price.

# Key Performance Indicators (KPIs)

- Total Revenue: ₹817,860.05

- Average Order Value: ₹38.31

- Total Pizzas Sold: 49,574

- Total Orders: 21,359

- Average Pizzas Per Order: 2.32

# Trends

Daily Trend of Orders:

Sunday: 3,108 orders  
Monday: 3,014 orders  
Tuesday: 3,090 orders  
Wednesday: 3,053 orders  
Thursday: 2,946 orders  
Friday: 3,057 orders  
Saturday: 3,091 orders

Monthly Trend of Orders:

January: 1,704 orders  
February: 2,004 orders  
March: 1,860 orders  
April: 1,799 orders  
May: 1,896 orders  
June: 1,862 orders  
July: 1,872 orders  
August: 1,906 orders  
September: 1,791 orders  
October: 1,836 orders  
November: 1,749 orders  
December: 2,080 orders

# Sales Breakdown

Sales by Pizza Category:

Classic: ₹358,024.10 (43.78%)  
Veggie: ₹255,756.21 (31.28%)  
Supreme: ₹204,079.74 (24.94%)

Sales by Pizza Size:

L: ₹334,980.38 (40.96%)  
M: ₹277,573.26 (33.94%)  
S: ₹205,306.41 (25.10%)

# Pizza Performance

Top 5 Pizzas by Revenue:

1. The Classic Deluxe  
2. The Barbecue Chicken  
3. The Hawaiian  
4. The Pepperoni Feast  
5. The Meat Lovers

Bottom 5 Pizzas by Revenue:

1. The Mediterranean  
2. The Brie Carre  
3. The Italian Caprese  
4. The Sweet Corn  
5. The Thai Chicken

Top 5 Pizzas by Quantity Sold:

1. The Classic Deluxe  
2. The Barbecue Chicken  
3. The Pepperoni Feast  
4. The Hawaiian  
5. The Meat Lovers

Bottom 5 Pizzas by Quantity Sold:

1. The Mediterranean  
2. The Brie Carre  
3. The Italian Caprese  
4. The Thai Chicken  
5. The Sweet Corn

Top 5 Pizzas by Total Orders:

1. The Classic Deluxe  
2. The Barbecue Chicken  
3. The Pepperoni Feast  
4. The Hawaiian  
5. The Meat Lovers

Bottom 5 Pizzas by Total Orders:

1. The Mediterranean  
2. The Brie Carre  
3. The Italian Caprese  
4. The Thai Chicken  
5. The Sweet Corn

# Conclusion

The analysis successfully identified revenue patterns, customer preferences, and product performance. Such insights can help the pizza business make informed decisions about menu offerings, marketing, and operations.