



# ASANSOL ENGINEERING COLLEGE

project on  
**CALORIES BURNT PREDICTION**

PRESENTED BY:

DEPARTMENT OF AI&ML



# OUR TEAM



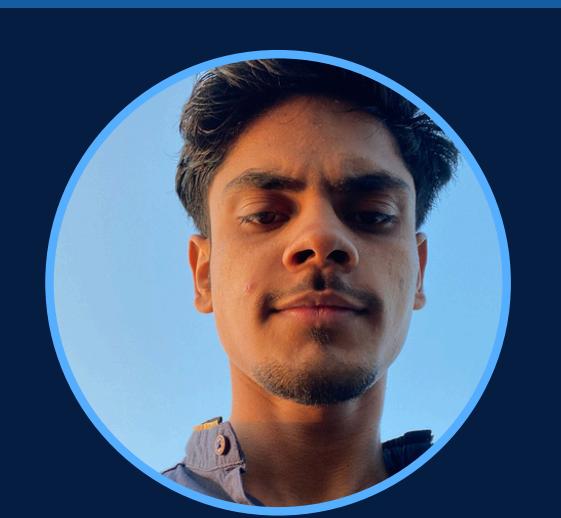
Chhavi Prabhat



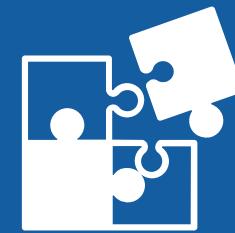
Piyush  
Prajapati



Vidya  
Shankar  
Ojha

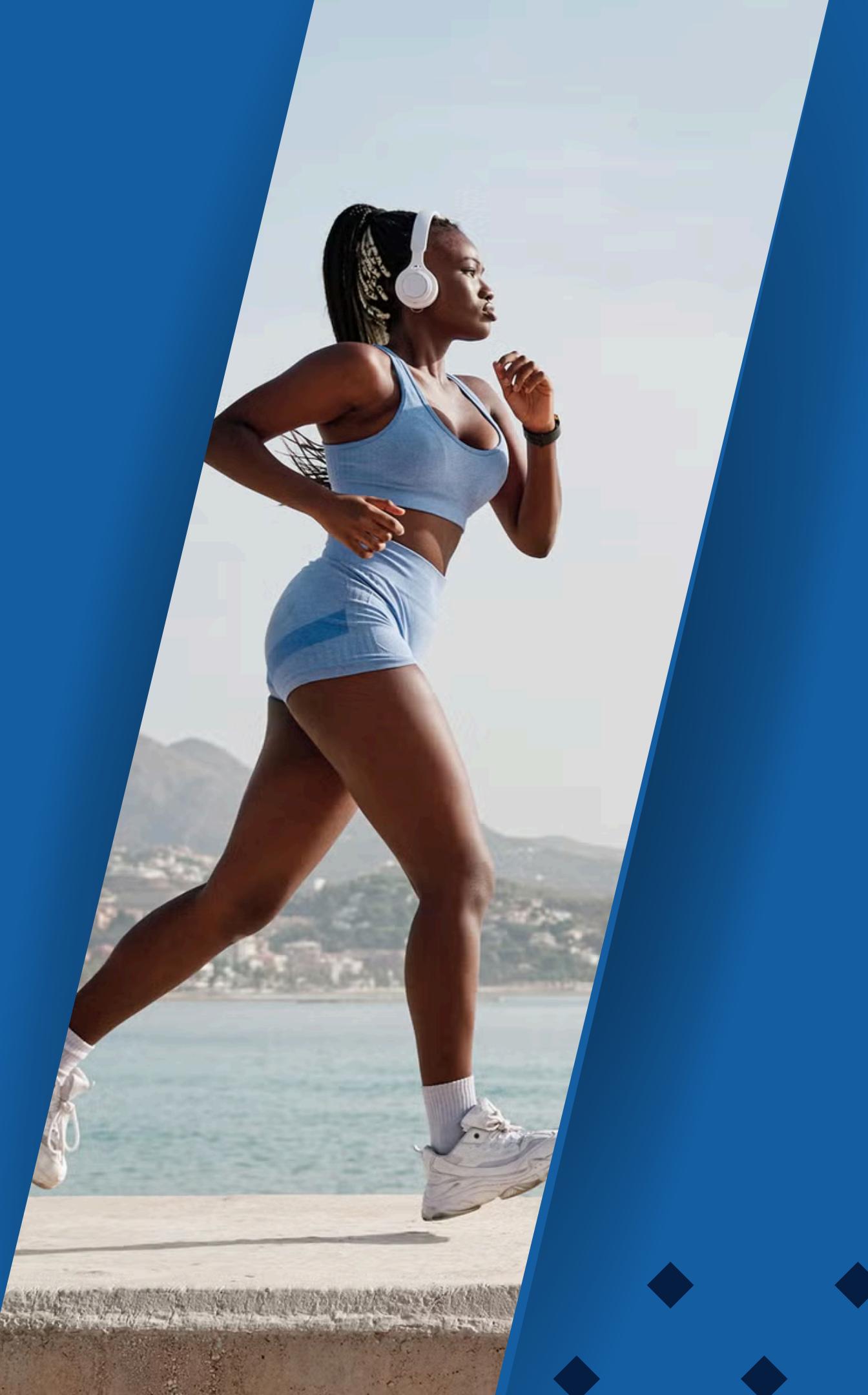


Shivam  
Tiwari



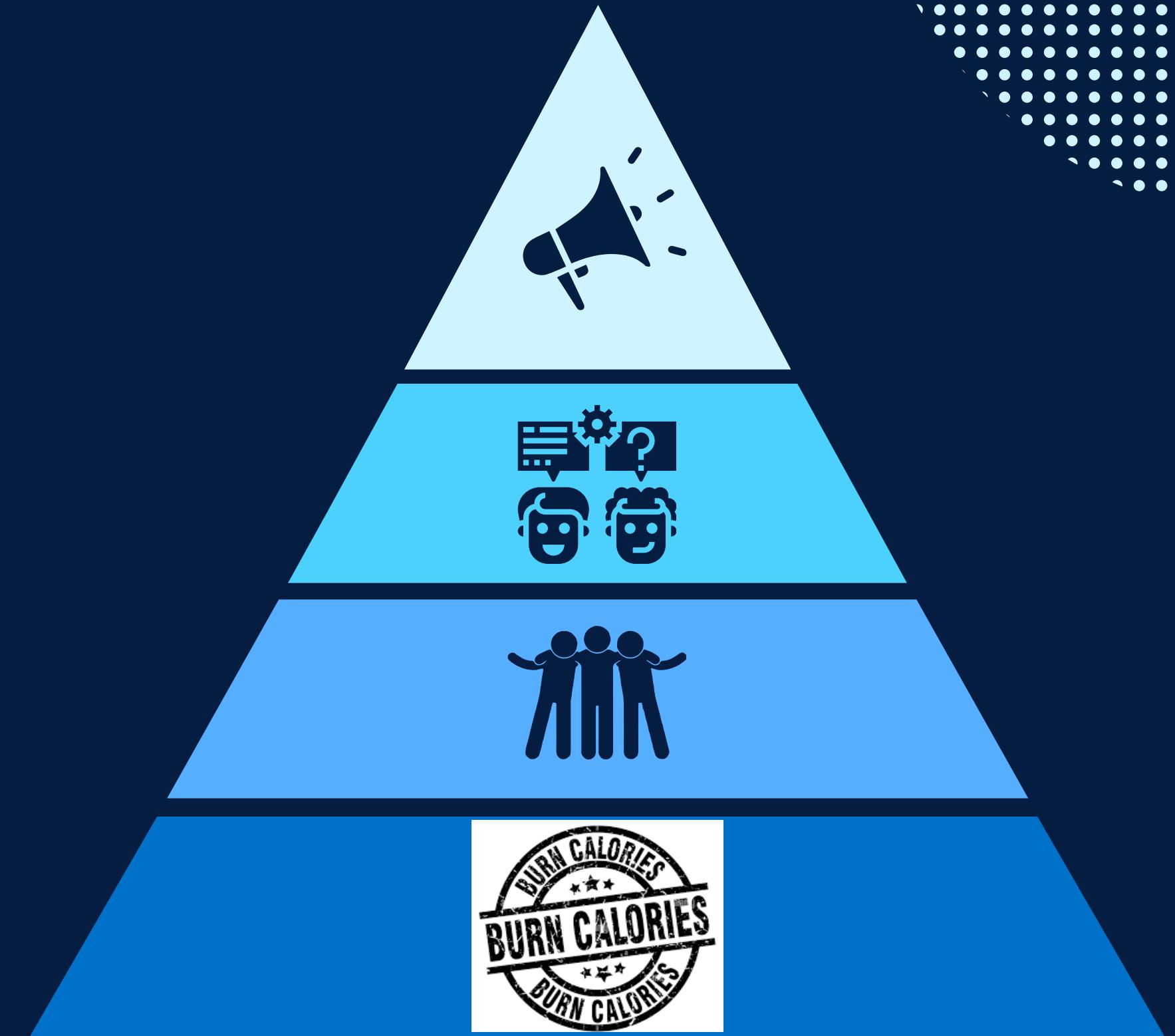
# ABOUT

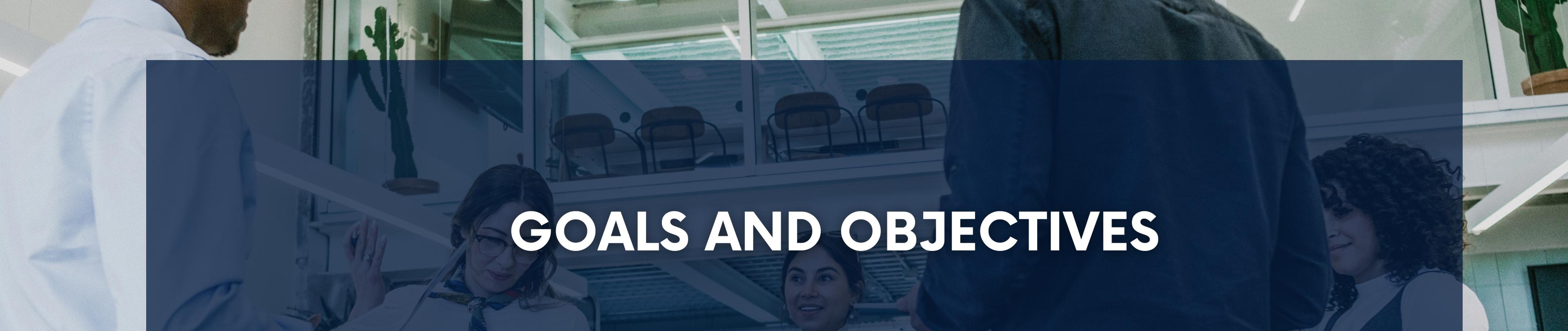
This model predicts the number of calories burned based on factors like activity type, intensity, duration, and individual characteristics (e.g., age, weight, gender). It uses machine learning algorithms, such as various encoding techniques and Linear Regression, to make accurate estimations



# DATASET

- 01 calories.csv
- 
- 02 exercise.csv





# GOALS AND OBJECTIVES

## Goals:

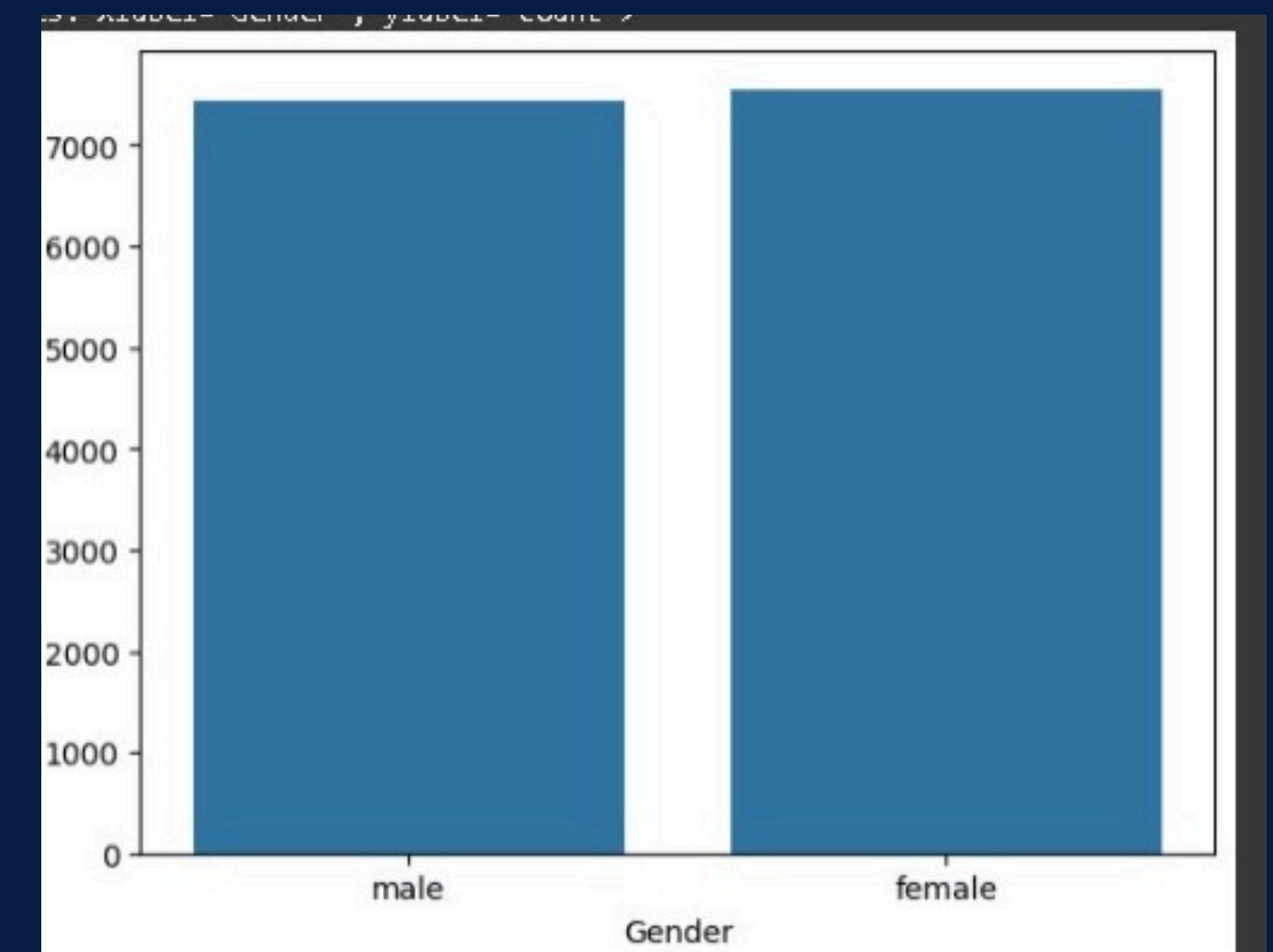
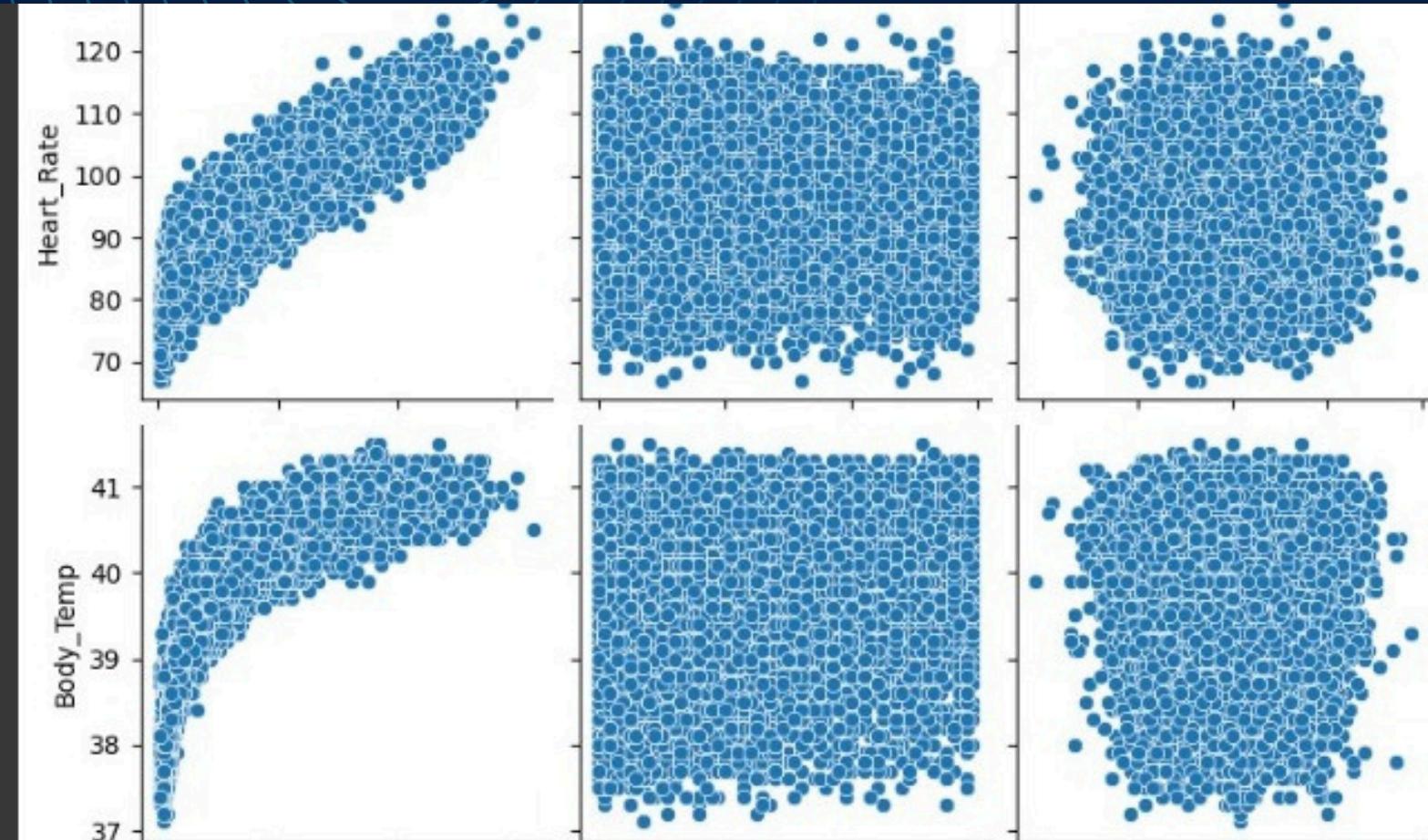
1. To develop an accurate model for predicting calories burned during physical activities.
2. To enhance personalized fitness and health tracking for users.
3. To support better planning of diet and exercise regimes

## Objectives:

1. Analyze key factors influencing calorie burn, such as activity type, intensity, and user-specific attributes.
2. Build and train a machine learning model using appropriate datasets.
3. Provide actionable insights for users to achieve fitness goals.

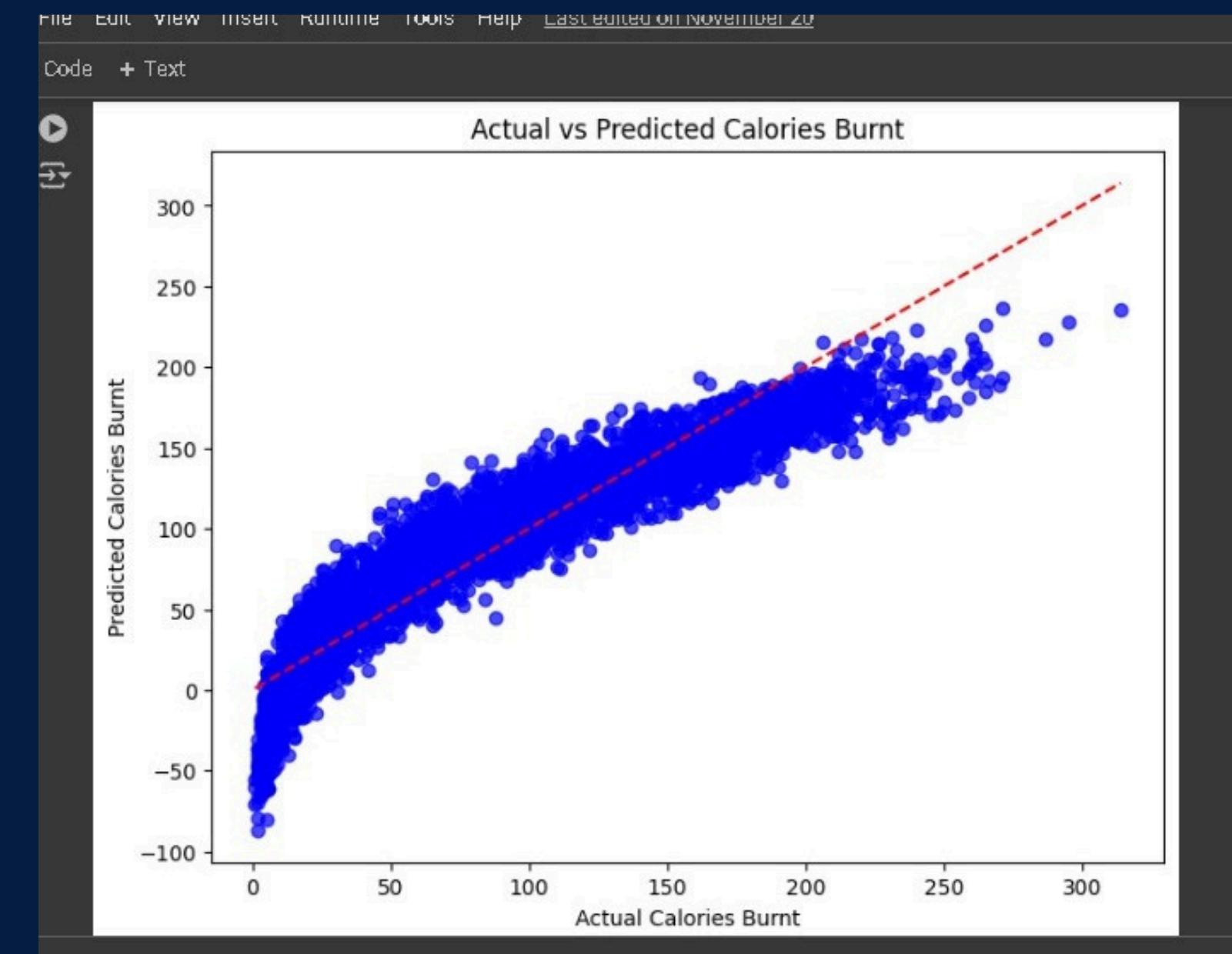
# Data Analysis

- Data Analysis is done on the loaded dataset to have the brief idea of data's graphically.
- The both dataset's calories and exercise have been visualized first and then the model is implemented



# Data Visualization

- Visualizations based on the final model.



# ALGORITHM USED

The various algorithms used in this model include Ordinal encoding technique and Linear regression.



## Linear Regression

Linear regression is used here to predict the continuous value "Calories Burnt" by taking in several inputs.



## Ordinal Encoding

Ordinal Encoding is the technique used to encode the input variable(gender) .

# CONCLUSION

The calorie burnt prediction model provides a valuable tool for personal fitness management by accurately estimating calories burned during activities. By leveraging machine learning techniques and user-specific data, it enables personalized insights for better health and lifestyle decisions.



# RESOURCES

- ***Kaggle*** : Used for collecting dataset's.
- ***Google Colab***: Used as a coding IDLE for machine learning model.
- ***Jupyter Notebook*** : Used for hosting web app in localhost.
- ***Github***: Used as collaboration platform