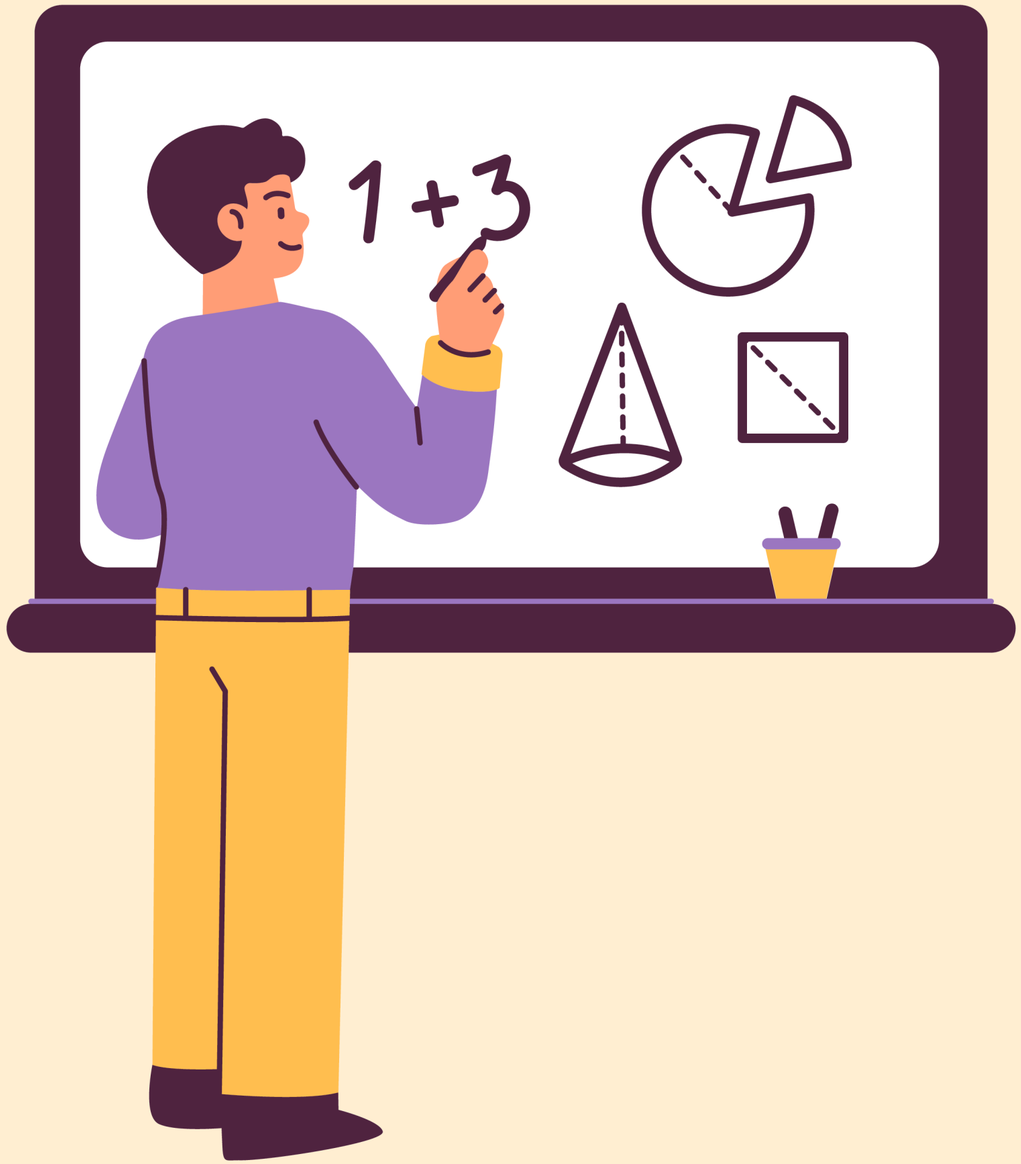

PREDICTING FOOTBALL MATCH OUTCOMES USING LOGISTIC REGRESSION"

TO PREDICT MATCH OUTCOMES

INTRODUCTION

- Football is unpredictable, but data can help us forecast outcomes.
- We use logistic regression, a statistical method for binary or multiclass classification.
- Goal: Predict win, lose, or draw based on historical match data.

WHY LOGISTIC REGRESSION?

- Simple yet powerful classification method.
- Predicts probabilities of categorical outcomes (e.g., win vs. not win).
- Easy to implement and interpret.
- Works well with small to medium-sized datasets.

KEY FEATURES USED

- Home vs Away team
- Team strength (FIFA ranking, ELO rating)
- Recent form (last 5 games)
- Goals scored/conceded
- Head-to-head results
- Possession %, shots on target, etc.

MODEL WORKFLOW

1. Collect Data: Past match stats from leagues or tournaments
2. Preprocess: Clean and convert data into numeric format
3. Train/Test Split: Divide dataset to train and evaluate
4. Apply Logistic Regression: Use sklearn or statsmodels in Python
5. Predict Outcomes: Output probabilities for win/draw/lose

Data:

✅ Sample Match Data Table

Match ID	Possession (%)	Shots on Target	Pass Accuracy (%)	Fouls	Home (1=Yes)	Result (Win=1)
1	62	7	89	10	1	1
2	48	4	82	14	0	0
3	55	5	85	12	1	1
4	39	2	76	16	0	0
5	66	6	91	9	1	1
6	50	3	83	13	0	0

RESULTS & CONCLUSION

- Achieve around 70–80% accuracy in predicting match outcomes.
- Logistic regression is useful for simple prediction tasks.
- For complex patterns, other models like Random Forest or Neural Networks may be better.
- Still, it’s a great start for sports analytics!

THANK YOU