No.	Project Statement	Basic Features to Use
1	Predict student performance based on study hours, attendance, and previous marks	Data import, scatter plot, test & score, decision tree
2	Analyze customer purchase behavior using supermarket dataset	Data table, box plot, data visualization
3	Predict pass/fail of students based on marks dataset	Logistic regression, confusion matrix
4	Classify patients as diabetic or non-diabetic using health data	Data pre-processing, SVM, test & score
5	Predict loan approval based on applicant data	Random forest, feature importance
6	Analyze traffic accident data to find high-risk zones	Data clustering, heatmap
7	Predict employee attrition based on age and job satisfaction	Decision tree, classification accuracy
8	Predict housing prices using area and number of rooms	Linear regression, correlation widget
9	Find relation between weather and crop yield	Data merge, scatter plot
10	Predict mobile price range based on specifications	Classification, ROC analysis

S.No	Dataset Topic	Target (Prediction)	Algorithms
1	Employee Attrition	Leave (Yes/No)	Logistic, Tree, RF, KNN
2	Student Pass Prediction	Pass (Yes/No)	All Classification
3	Loan Approval	Approved (Yes/No)	Logistic, RF, Tree
4	Bank Loan Default	Default (Yes/No)	Logistic, RF

5	Customer Churn	Churn (Yes/No)	RF, Tree, KNN
6	Email Spam Detection	Spam (Yes/No)	Naïve Bayes, RF
7	Heart Disease	Disease (Yes/No)	Logistic, RF
8	Diabetes Prediction	Diabetes (Yes/No)	Logistic, KNN
9	Breast Cancer	Cancer (Yes/No)	RF, Tree
10	Credit Card Fraud	Fraud (Yes/No)	RF, Tree
11	Hotel Booking Cancellation	Cancel (Yes/No)	Logistic, RF
12	Insurance Purchase	Buy (Yes/No)	Logistic
13	Online Purchase	Buy (Yes/No)	RF, Tree
14	Mobile Purchase	Buy (Yes/No)	KNN, Logistic
15	Scholarship Eligibility	Eligible (Yes/No)	Tree, RF
16	Placement Prediction	Placed (Yes/No)	Logistic
17	Exam Attendance	Attend (Yes/No)	KNN
18	Library Book Return	Returned (Yes/No)	RF
19	School Admission	Selected (Yes/No)	Logistic
20	Hostel Allotment	Eligible (Yes/No)	Tree
21	Sports Team Selection	Selected (Yes/No)	RF
22	Rain Prediction	Rain (Yes/No)	RF, Tree

23	Crop Disease	Diseased (Yes/No)	KNN
24	Plant Water Requirement	Water Needed (Yes/No)	Tree
25	Fruit Quality	Good (Yes/No)	RF
26	Milk Quality	Good (Yes/No)	Logistic
27	Water Potability	Safe (Yes/No)	RF
28	Air Quality	Good (Yes/No)	Tree
29	Vehicle Service Needed	Yes/No	RF
30	Car Purchase	Buy (Yes/No)	Logistic
31	Online Course Completion	Complete (Yes/No)	KNN
32	Movie Recommendation	Like (Yes/No)	KNN
33	Restaurant Visit	Visit (Yes/No)	Logistic
34	Gym Membership Renewal	Renew (Yes/No)	RF
35	Electricity Bill Payment	Paid (Yes/No)	Tree
36	Employee Promotion	Promote (Yes/No)	RF
37	Interview Selection	Selected (Yes/No)	Logistic
38	Fake News Detection	Fake (Yes/No)	Naïve Bayes
39	Customer Satisfaction	Satisfied (Yes/No)	RF
40	Product Return	Return (Yes/No)	Logistic

NLP

No.	Project Statement	Basic Features to Use
1	Sentiment analysis of movie reviews (positive/negative)	Text mining, word cloud, classification
2	Classify SMS as spam or not spam	Tokenization, bag of words, Naive Bayes
3	Analyze tweets about a product (positive/neutral/negative)	Text preprocessing, text embedding
4	Identify language of a short text (English, French, etc.)	Text vectorization, classification
5	Classify news articles into categories (sports, politics, tech)	Word frequency, logistic regression
6	Detect fake news headlines	Text mining, test & score
7	Summarize feedback from students about school	Word cloud, frequency distribution
8	Predict author's gender based on writing style	Text features, kNN
9	Analyze product reviews on e-commerce dataset	Sentiment polarity, feature importance
10	Topic detection in articles (education, health, environment)	TF-IDF, clustering

CV

No.	Project Statement	Basic Features to Use
1	Classify images of **cats and dogs**	Image embedding, logistic regression
2	Identify **fruits** (apple, banana, orange) using image features	Image viewer, kNN classifier
3	Detect whether a **face has glasses or not**	Image import, feature extraction

No.	Project Statement	Basic Features to Use
4	Recognize handwritten digits (0–9) using MNIST dataset	PCA, SVM
5	Sort images as **day or night** photos	Image embedding, clustering
6	Classify **vehicles** (car, bike, bus)	Random forest, test & score
7	Detect whether a leaf image is **healthy or infected**	Image embedding, classification
8	Identify **traffic signs**	Image viewer, decision tree
9	Differentiate between **male and female faces**	Image embedding, logistic regression
10	Identify **smiling vs neutral** expressions	PCA, classification accuracy