

Week 3: Predictive Modelling (Total video duration= 1.5 hours. You will be required to spend 30 minutes/day along with practicing datasets and quizzes)

Mentor Session Duration: 2 hours

Faculty Name: Dr. Abhinanda Sarkar

Number of videos: 7

Learning Outcomes from the Module:

After learning from this module, learners will be able to understand:

▶ **Concept of Linear Regression**

▶ **Concept of Multicollinearity**

▶ **Logistic Regression Learning Process**

▶ **Logistic Regression Variants**

▶ **LDA - How does it work**



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Video No.	Video Name	Duration of the video (rounded off to the nearest integer)	Topics Covered	Conceptual or Hands On
1	Introduction to LDA	39:00	<ul style="list-style-type: none"> • Concept of Discriminant Analysis • Concept of LDA • Quadratic Discriminant Analysis • Discriminant Analysis Applications • Standardised, Unstandardised and Structure Coefficients • Comparison with other techniques 	Conceptual
2	When LDA is used	05:30	<ul style="list-style-type: none"> • In what situations does LDA comes to our rescue 	Conceptual
3	How does LDA work	04:30	<ul style="list-style-type: none"> • Multiple step approach to understand how LDA works 	Conceptual
4	How are LDA models represented	01:30	<ul style="list-style-type: none"> • Way to represent LDA models 	Conceptual
5	How does an LDA make predictions	06:00	<ul style="list-style-type: none"> • Approach of LDA while making predictions 	Conceptual

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6	Summary	02:00	<ul style="list-style-type: none"> Summarisation of the entire concept of LDA 	Conceptual
7	Hands-On Exercise on LDA	24:00	<ul style="list-style-type: none"> A hands-on exercise on the working of LDA 	Hands-On

Few textbooks that you can refer to:

1

Ashish Kumar

Learning Predictive Analytics with Python

2

Thomas W. Miller

Modeling Techniques in Predictive Analytics
with Python and R - A Guide to Data Science

3

Alvaro Fuentes

Hands-On Predictive Analytics with Python

