**NLP - Topic Modeling**

**Instructions:**

Please share your answers filled in-line in the word document. Submit code separately wherever applicable.

Please ensure you update all the details:

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_ Batch ID:** \_\_\_\_\_\_\_\_\_\_\_

**Topic: NLP - Topic Modeling**

**Hints:**

**1. Business Problem**

* 1. **What is the business objective?**
  2. **Are there any constraints?**

**2. Data Pre-processing**

**2.1 Data Cleaning, Feature Engineering, etc.**

**3. Exploratory Data Analysis (EDA).**

**4. Model Building**

**4.1 Perform Data Cleaning, Stemming, Lemmatization, Topic Modelling and Text Summarization.**

**5. Write about the benefits/impact of the solution - in what way does the business (client) benefit from the solution provided?**

**Problem Statement-1**

1. Perform NLP – Topic Modelling and Text Summarization by following all the steps as mentioned below.
2. Data Cleaning using regular expressions, Countvectorizer, POS Tagging, NER, Topic Modelling (LDA, LSA) and Text Summarization.

Hint: - Use Data.csv file given in hands-on material.

Text

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**Problem Statement-2**

Perform Topic Modelling and Text Summarization on the given text data. Use the NLP-TM text file.

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