## Module 9: Time Series Analysis

Assignment

# edureka!



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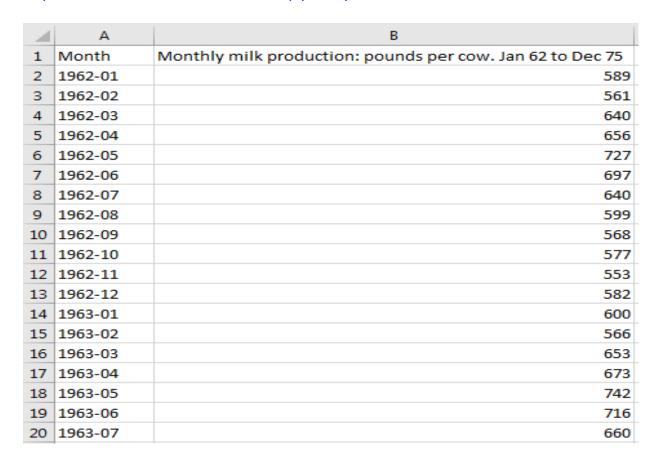
### Module 9: Assignment

#### Time Series Analysis:

Analyze the information given in the Cow milk production dataset and predict the values using ARIMA and HoltWinters model. Check which model can give higher accuracy on this data

The dataset can be loaded using this link:

https://edureka.wistia.com/medias/5q3peveuy1/download?media\_file\_id=197085524



The description of the attributes in the dataset are as follows:

- Month month and year as independent time variable, from Jan 62 to Dec 75.
- Monthly milk production Monthly milk production: pounds per cow, from Jan 62 to Dec 75.

#### Perform the following tasks on the dataset

#### Task 1: Load the Data into R

- → Create two Time Series data, with training set till 1974 and test set only containing the year 1975.
- → Plot the data for analyzing trend and seasonality.

Task 2: Predict the values for the year 1974 to 1975 using ARIMA model and HoltWinters model

- → Compare the predicted values with actual values through visualization.
- → Repeat the above step for both the models and check which one performs better.

