

INTRODUCTION TO SUPERVISED LEARNING

- In simple terms, supervised learning makes use of supervised techniques to predict an unknown observation for a given domain.
- The application of supervised techniques are enormous in our daily life.
- Below are few examples:

1

Gmail Application

Gmail



2

Meteorology

Weather Forecast



3

Medical

Diagnosis



4

Banking

**Fraud
Non-Fraud**



5

Stock Markets

**Forecasting the
stock market**



6

Business

Sales



MACHINE LEARNING TECHNIQUES

- Machine learning techniques come in two flavours namely,
 1. Supervised techniques: Also known as “predictive techniques”.
 2. Unsupervised techniques: Often addressed as “descriptive techniques”.

Techniques	Supervised	Unsupervised
Classification of Techniques	<ol style="list-style-type: none">1. Classification2. Regression	<ol style="list-style-type: none">1. Association Rule mining2. Clustering
Key Objective	<ol style="list-style-type: none">1. Predict/Forecast	<ol style="list-style-type: none">1. To mine relationships between features2. To mine objects with similar behavior or characteristics

Table 1: Categories of Machine Learning Techniques

SUPERVISED LEARNING : EXAMPLE



PHASES IN SUPERVISED LEARNING

