**[Que-50.4] - What is the difference between supervised and unsupervised learning?**

### **Difference between Supervised and Unsupervised Learning**

* **Supervised Learning**:
  + Involves training a model on a labeled dataset.
  + The dataset includes input-output pairs.
  + Examples: Regression, Classification (e.g., Linear Regression, Decision Trees, SVM).
* **Unsupervised Learning**:
  + Involves training a model on data without labeled responses.
  + The algorithm tries to learn the patterns and structure from the data.
  + Examples: Clustering, Association (e.g., K-means, PCA).