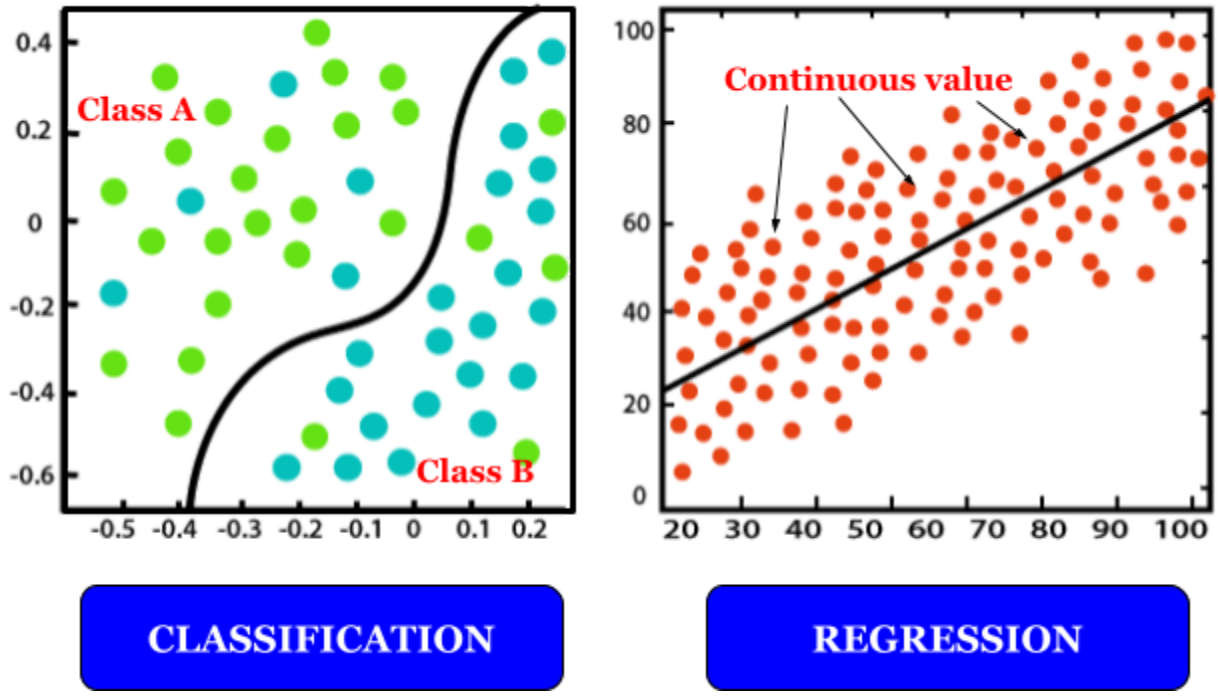
Classification vs Regression in Machine Learning

Classification modeling problems are different from predictable retrospective (regression) problems.

Classification: Separation is the function of predicting a different class label.
Regression: Deregulation is a function of predicting a continuous amount.



For example:
The classification algorithm may predict a continuous value, but a continuous value is in the form of a class label opportunity. The regression algorithm may predict a different value, but a value is divided by the value of the total value. Other algorithms can be used for partitioning and retrieval with small modifications, such as trunk trees and artificial neural networks. Some algorithms cannot, or cannot be easily applied to both types of problems, such as predicting line deflection of predictive models and predictive regression of predictive modeling.

Importantly, the way we test classification and regression varies and does not pass.
For example:

1. Classification predictions can be evaluated using accuracy, whereas regression predictions cannot.

2. Regression predictions can be evaluated using root mean squared error, whereas classification predictions cannot.

CLASSIFICATION	REGRESSION
• Classification is the task of predicting a discrete class label	• Regression is the task of predicting a continuous quantity
• In a classification problem data is labelled into one of two or more classes	• A regression problem requires the prediction of a quantity
• A classification problem with two classes is called binary, more than two classes is called a multi-class classification	• A regression problem with multiple input variables is called a multivariate regression problem
• Classifying an email as spam or non-spam is an example of a classification problem	• Predicting the price of a stock over a period of time is a regression problem