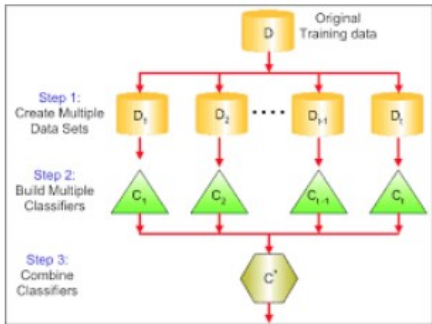
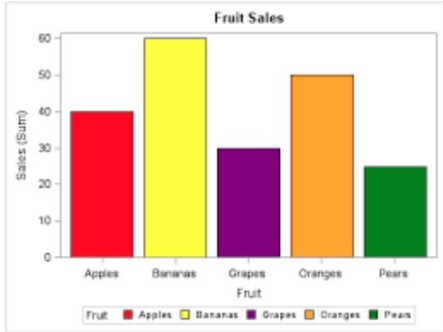


Word	Description												
Backpropagation	<p>In neural networks, if the estimated output is far away from the actual output (high error), we update the biases and weights based on the error. This weight and bias updating process is known as Back Propagation. Back-propagation (BP) algorithms work by determining the loss (or error) at the output and then propagating it back into the network. The weights are updated to minimize the error resulting from each neuron. The first step in minimizing the error is to determine the gradient (Derivatives) of each node w.r.t. the final output.</p>												
Bagging	<p>Bagging or bootstrap averaging is a technique where multiple models are created on the subset of data, and the final predictions are determined by combining the predictions of all the models. Some of the algorithms that use bagging technique are :</p> <ul style="list-style-type: none">• Bagging meta-estimator• Random Forest  <p>The diagram illustrates the Bagging process in three steps. Step 1: 'Create Multiple Data Sets' shows the 'Original Training data' (D) being split into multiple subsets (D₁, D₂, ..., D_{i+1}, D_i). Step 2: 'Build Multiple Classifiers' shows each subset being used to train a classifier (C₁, C₂, ..., C_{i+1}, C_i). Step 3: 'Combine Classifiers' shows the outputs of all individual classifiers being aggregated to form the final combined classifier (C*).</p>												
Bar Chart	<p>Bar charts are a type of graph that are used to display and compare the numbers, frequency or other measures (e.g. mean) for different discrete categories of data. They are used for categorical variables. Simple example of a bar chart:</p>  <p>The bar chart, titled 'Fruit Sales', displays the sales (sum) for five different fruits. The y-axis represents 'Sales (Sum)' ranging from 0 to 60. The x-axis lists the fruits: Apples, Bananas, Grapes, Oranges, and Pears. The bars are color-coded: Apples (red), Bananas (yellow), Grapes (purple), Oranges (orange), and Pears (green). The sales values are approximately: Apples (40), Bananas (60), Grapes (30), Oranges (50), and Pears (25).</p> <table border="1"><thead><tr><th>Fruit</th><th>Sales (Sum)</th></tr></thead><tbody><tr><td>Apples</td><td>40</td></tr><tr><td>Bananas</td><td>60</td></tr><tr><td>Grapes</td><td>30</td></tr><tr><td>Oranges</td><td>50</td></tr><tr><td>Pears</td><td>25</td></tr></tbody></table>	Fruit	Sales (Sum)	Apples	40	Bananas	60	Grapes	30	Oranges	50	Pears	25
Fruit	Sales (Sum)												
Apples	40												
Bananas	60												
Grapes	30												
Oranges	50												
Pears	25												