

Questions 1.

a) Explain how you can implement DL in a real-world application.

Answer:

1. Understand the problem you want to solve using Deep Learning, like recognizing images, predicting prices, or understanding text.
2. Gather data related to the problem, like pictures, numbers, or text. Make sure the data is clean and organized.
3. Choose the right kind of Deep Learning model for your problem. For example, if you're working with images, you might use a Convolutional Neural Network.
4. Train your model using the data you collected. This means showing the model examples of the problem and letting it learn from them.
5. Test your trained model to see how well it performs on new data that it hasn't seen before.
6. If the model performs well, you can deploy it in your application. This means using it to make predictions or decisions in the real world.
7. Keep an eye on how your model is doing and update it regularly with new data to keep it accurate and up-to-date.

(b) What is the use of Activation function in Artificial Neural Networks? What would be the problem if we don't use it in ANN networks.

Answer:

Activation functions in Artificial Neural Networks (ANNs) help neurons in the network to decide whether to "fire" or not. They add complexity to the model, allowing it to learn more complicated patterns in the data.

If we didn't use activation functions in ANN networks:

- The network would only be able to learn simple patterns and relationships in the data, limiting its ability to understand complex information.
- The network wouldn't be able to adapt and learn from the data effectively, making it less useful for solving real-world problems.

In simple terms, activation functions are like switches that control the flow of information in a neural network. Without them, the network wouldn't be able to learn or understand the data properly.

