Q. State the difference between CNN and RNN.

Q. Why do we use a pooling layer in CNN?

**Feature map**

|  |  |  |  |
| --- | --- | --- | --- |
| **?** | **?** | **?** | **?** |
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Perform the following pooling on the above feature map

1. Max Pooling
2. Average Pooling

Q. Explain LSTM in detail and state its application.

## Q. Why do we prefer Convolutional Neural networks (CNN) over Artificial Neural networks (ANN) for image data as input?

Q. An input image has been converted into a matrix of size 12 X 12 along with a filter of size 3 X

3 with a Stride of 1. Determine the size of the convoluted matrix.

## Q. Explain the significance of the RELU Activation function in Convolution Neural Network

Q. Enlist the types of RNN, also explain the two issues of standard RNN.

Q. What Is an Auto-encoder?

Q. What are Echo State Networks? Explain in detail.

Q. Explain parameter sharing in brief with example.

1. What are the benefits of parameter sharing in CNNs. Why is sharing parameters a good idea? Does weight sharing occur in Recurrent Neural networks?