1. Do you think DL is going to replace ML in the near future? Why?

Ans:

According to what I have learnt as of now, Deep learning works with larger data sets when compared to Machine learning. This means that the output will be more accurate. Implementation of deep learning needs a lot of computing power but looking at the technological improvements of today, I feel that it won't be a problem in future. So, I do think DL will soon replace ML.

1. **Unsupervised Learning:**

Pros- It can help us understanding the hidden patterns of the data it works on.

Cons- Output provided may be complex and difficult to understand.

**Supervised Learning-**

Pros-

* Input data can be trained in specific number of attempts.
* Supervised machine learning predicts a target numerical value from some given data and labels.

Cons-

* Undesired output might be produced if large change is made on the input data.
* Supervised learning cannot give you unknown information from the training data like unsupervised learning do.

**Reinforcement Learning-**

Pros-

* Once an error occurs, the chances of the same error occurring again is less. This is because it works on the basis of punishment and reward system.
* In the absence of a training dataset, it is bound to learn from its experience.

Cons-

* Reinforcement learning is not preferable to use for solving simple problems.
* Too much reinforcement learning can lead to an overload of states which can diminish the results.