Fundamentals of Deep Learning Assignment 1

1. What is different between machine learning and deep learning?
2. What is perceptron?
3. How is deep learning better than machine learning?
4. What are some of the most used applications of deep learning (list – out)?
5. What is the meaning of overfitting?
6. What is activation function?
7. What are the steps involved in training perceptron in deep learning?
8. What is the use of loss function?
9. List some of the deep learning framework or tools that we are used?
10. What is forward propagation?
11. What is backward propagation?
12. What are hyper parameters in deep learning?
13. How can hyper parameter be trained in neural networks?
14. What is the meaning of drop out in deep learning?
15. What is called as tensor?
16. What are the advantages of using tensor flow?
17. List out some of the disadvantages of deep learning?
18. List out some of the supervised learning algorithm and unsupervised learning algorithm in deep learning?
19. Define sigmoid function and write its equation?
20. What is a step function?
21. What does a neuron compute?
22. Define Relu function and its equation?
23. Why do we normalize the input?
24. What are the hyper parameters and defines it?
25. What is the use of weight and bias in neural networks?
26. Define soft max function and write equation?
27. List and define the Keras models?
28. Comparison of step function sigmoid function, Keras function?
29. What is the identity function?
30. Find the output of diagram given below y1 and y2 using sigmoid function where x1 = 1 and x2 = 2.

Use sigmoid function