Sardar Vallabhbhai National Institute of Technology
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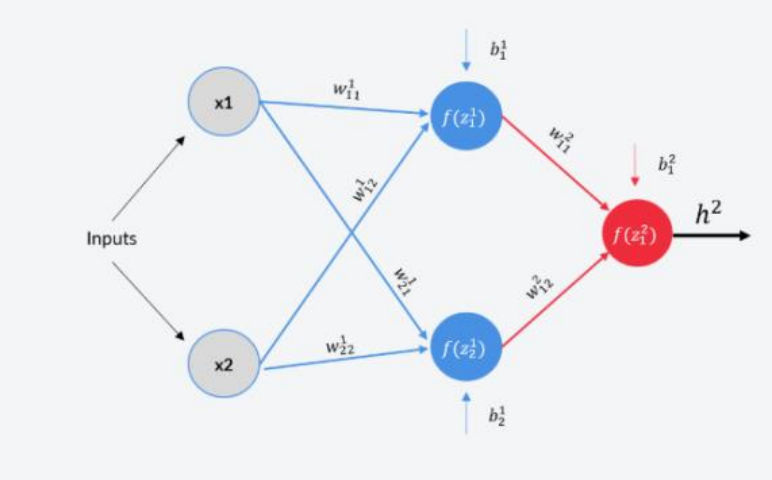
Department of Artificial Intelligence
Deep Learning (AI302)

Lab Practical– 1

1) Introduction of PyTorch Tensors and Basic Operations.

    a) To understand PyTorch tensors, their initialization methods, and data types.
    b) To perform tensor operations such as arithmetic, broadcasting, indexing, and reshaping.
    c) To explore automatic differentiation using PyTorch's Autograd system.

2) Perform all linear algebra operation with Tensorflow.
3) Write a program to implement AND OR gates using Perceptron.
4) Implementation of XOR Problem using PyTorch Neural Network.
5) Implement Simple below Neural Network to solve regression problem.



References:

https://www.tensorflow.org/api_docs/python/tf
https://www.tensorflow.org/api_docs/python/tf/math
https://www.tensorflow.org/api_docs/python/tf/linalg