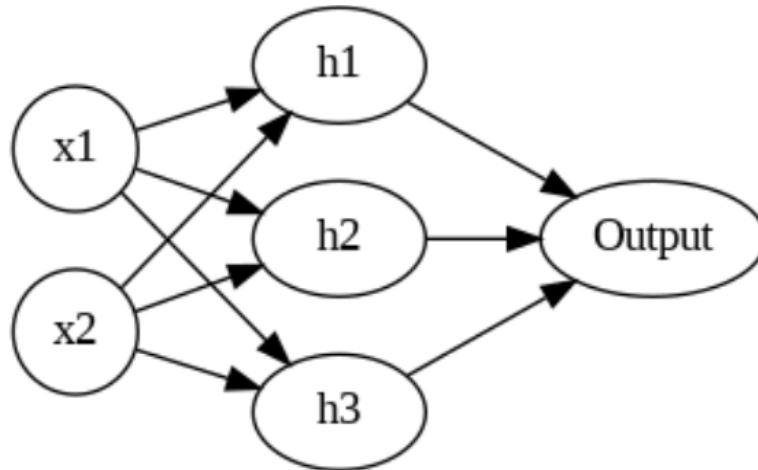


Practical - 5

Program Definition:

Write a python program to create a simple 3-layer neural network for implementation of binary function.



Output:

```
ADESHARA BRIJESH : 21012021001
for mean square:
Epoch 0, Loss: 0.2645224547488465
for mean square:
Epoch 100, Loss: 0.23544693643676556
for mean square:
Epoch 200, Loss: 0.19594209318725467
for mean square:
Epoch 300, Loss: 0.13626518037837138
for mean square:
Epoch 400, Loss: 0.07203214749184045
for mean square:
Epoch 500, Loss: 0.03226548202166872
for mean square:
Epoch 600, Loss: 0.015203170945552777
for mean square:
Epoch 700, Loss: 0.008093082260992335
for mean square:
Epoch 800, Loss: 0.004809905705654819
for mean square:
Epoch 900, Loss: 0.0031130852286081184
weights are:
[[-8.17821953]
 [ 0.99394215]
 [-8.03506739]]
bias are:
[[3.14940004]]
Predictions after training:
[[0.03671125]
 [0.95034247]
 [0.95278526]
 [0.05054154]]
```