```python
import numpy as np

# -------- Inputs --------
X = np.array([[0.05],
              [0.10]])   # shape (2,1)

# -------- Random Weights --------
# Hidden layer weights (2 neurons × 2 inputs)
W1 = np.random.uniform(-0.5, 0.5, (2, 2))

# Output layer weights (2 neurons × 2 hidden)
W2 = np.random.uniform(-0.5, 0.5, (2, 2))

# -------- Bias --------
b1 = np.array([[0.5],
               [0.5]])   # for hidden layer

b2 = np.array([[0.7],
               [0.7]])   # for output layer

# -------- Forward Pass --------

# Hidden layer
Z1 = np.dot(W1, X) + b1
H = np.tanh(Z1)

# Output layer
Z2 = np.dot(W2, H) + b2
O = np.tanh(Z2)
```

```
Hidden Layer Output:
 [[0.42755817]
 [0.47868473]]
Final Output:
 [[0.7434951 ]
 [0.36406981]]
```