

Task 2

```
In [1]: #Importing required libraries
import numpy as np
import matplotlib.pyplot as plt
import sys
```

```
In [2]: #np.random.seed(42)

#Generating normally distributed random numbers by pseudorandom generator
#each class has 50 data points and class-labels are 0,1 and 2
#total features(dimensions) are 2
# each class is linearly-separable
class_0 = np.random.randn(50, 2) + np.array([0, -3]) # this class is centred
around point (0,-3)
class_1 = np.random.randn(50, 2) + np.array([3, 3]) # this class is centred
around point (3,3)
class_2 = np.random.randn(50, 2) + np.array([-3, 3]) # this class is centred
around point (-3,3)

dataset = np.vstack([class_0,class_1,class_2]) #combining 50 data points of
class 0, 50 data points of class 1,

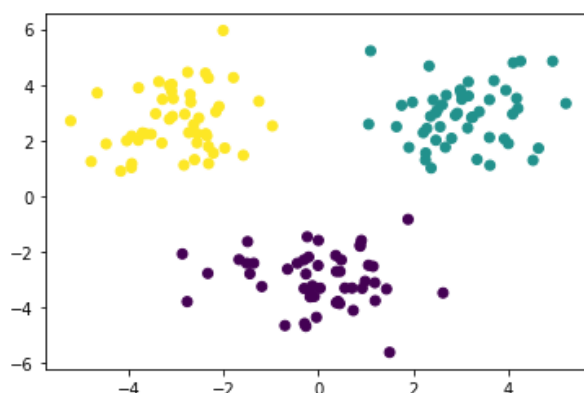
#50 data points of class 2 in a vertical fashion or think like I have put it
in a vertical stack

labels = np.array([0]*50 + [1]*50 + [2]*50) #assigning class-labels, initial
50 data-points as class 0, then
#class-1 and then class-2

vect = np.zeros((150, 3)) # creating a 150*3 size matrix

for i in range(150):
    vect[i, labels[i]] = 1 #here, 150*3 matrix vect has 3 columns in which c
olumn-0 has values as 1 for those data
#points which don't have class-label as 0 and column-1 has values as 1 for t
hose data
#points which don't have class-label as 1 and column-2 has values as 1 for t
hose data
#points which don't have class-label as 2
```

```
In [3]: plt.scatter(dataset[:,0], dataset[:,1], c=labels)
plt.show() # it shows the linearly-separable data points
```



```
In [4]: bias=1 #assuming bias as 1
data=[]
for i in range(150):
    temp=[]
    temp.append(bias)
    temp.append(dataset[i][0])
    temp.append(dataset[i][1])
    temp.append(labels[i])
    data.append(temp) # creating 150*4 size matrix in which fetarures are x
0,x1,x2 where x0 is bias and x1,x2
# are features, last column represents the class-label
data #display the dataset
```

```
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```

In [5]: `vect` *#display the above created 150*3 matrix*

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[illegible]

Estimating input weight vector for class 0

```

In [6]: # For class 0

weights_0=[0.20,1.00,-1.00] # initializing weights

def predict(inputs,weights_0): # This function takes values of features (x0,
x1,x2)

    #one by one from dataset and weight vector as input and return the value
    according
    #to the definition of standard sigmoid function

    threshold = 0.0 # I have set the threshold as 0
    v = 0.0
    for input,weight in zip(inputs,weights_0):
        v += input*weight
    return 1 if v >= threshold else 0.0

def accuracy(matrix,weights_0): # This function gives the accuracy on the scale of 0 to 1
    # in terms of how many points are correctly out of total number of data points

    num_correct=0.0 #initialized total correct points as 0
    preds=[]
    for i in range(len(matrix)):
        pred=predict(matrix[i][: -1],weights_0)
        preds.append(pred)
        if pred==vect[i][0]: num_correct += 1.0 #if data point is correctly
        classified then number of
        #correctly classified points are added by 1

    print("Predictions:",preds)
    return num_correct/float(len(matrix))

def train_weights(matrix,weights_0,iterations=1000,l_rate=1.0): # This function is to train weights
    #According to perceptron convergence theorem, after number of iterations, maximum accuracy will be reached
    # and after that weight vector will not be changed. Since, generated data is of random numbers.
    #So, each time when we run the cell, dataset will be different and so, number of iterations
    #to get the estimated weight vector with accuracy 1.0 will be different and so accordingly you can change
    # the value of number of iterations.
    for epoch in range(iterations):
        cur_acc=accuracy(matrix,weights_0)
        print("\nIteration %d \nWeights: "%epoch,weights_0)
        print("Accuracy: ", cur_acc )
        if cur_acc==1.0 and True : break

        for i in range(len(matrix)):
            prediction = predict(matrix[i][: -1],weights_0)
            error = vect[i][0] - prediction #to get the difference between predicted and actual class-label

            if True:
                print("Training on data at index %d..."%i)
                for j in range(len(weights_0)):
                    if True:
                        sys.stdout.write("\t Weight[%d]: %0.5f ---> "%(j,weights_0[j]))
                        weights_0[j]= weights_0[j] + (l_rate*error*matrix[i][j]) # weight is modified
                        #according to the definition
                        if True: sys.stdout.write("%0.5f\n"%weights_0[j])
        print("\n Final estimated weight vector with accuracy %0.5f is:"%cur_acc)

```

```
c)
    return weights_0
train_weights(data, weights_0=weights_0, iterations=1000, l_rate=1.0)
```

```
Predictions: [1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 0.0, 1,
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```

```
Iteration 0
Weights: [0.2, 1.0, -1.0]
Accuracy: 0.7933333333333333
Training on data at index 0...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 1...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 2...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 3...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 4...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 5...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 6...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 7...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 8...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 9...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 10...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 11...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 12...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 13...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
```

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Training on data at index 14...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 15...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 16...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 17...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 1.00000 ---> 1.00000
  Weight[2]: -1.00000 ---> -1.00000
Training on data at index 18...
  Weight[0]: 0.20000 ---> 1.20000
  Weight[1]: 1.00000 ---> -1.86763
  Weight[2]: -1.00000 ---> -3.08402
Training on data at index 19...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 20...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 21...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 22...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 23...
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  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 24...
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  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 25...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 26...
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  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 27...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 28...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 29...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 30...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
```

```
Training on data at index 31...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 32...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 33...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 34...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 35...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 36...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 37...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 38...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 39...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 40...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 41...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 42...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 43...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 44...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 45...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 46...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 47...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
```

```
Training on data at index 48...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 49...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 50...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 51...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 52...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 53...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 54...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 55...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 56...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 57...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 58...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 59...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 60...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 61...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 62...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 63...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 64...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
```

```
Training on data at index 65...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 66...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 67...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 68...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 69...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 70...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 71...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 72...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 73...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 74...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 75...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 76...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 77...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 78...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 79...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 80...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 81...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
```



```
Training on data at index 82...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 83...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 84...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 85...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 86...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 87...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 88...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 89...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 90...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 91...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 92...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 93...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 94...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 95...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 96...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 97...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 98...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
```

```
Training on data at index 99...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 100...
  Weight[0]: 1.20000 ---> 1.20000
  Weight[1]: -1.86763 ---> -1.86763
  Weight[2]: -3.08402 ---> -3.08402
Training on data at index 101...
  Weight[0]: 1.20000 ---> 0.20000
  Weight[1]: -1.86763 ---> 0.44886
  Weight[2]: -3.08402 ---> -4.86259
Training on data at index 102...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 103...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 104...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 105...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 106...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 107...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 108...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 109...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 110...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 111...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 112...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 113...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 114...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 115...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
```

```
Training on data at index 116...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 117...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 118...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 119...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 120...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 121...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 122...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 123...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 124...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 125...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 126...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 127...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 128...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 129...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 130...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 131...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 132...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
```

```
Training on data at index 133...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 134...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 135...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 136...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 137...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 138...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 139...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 140...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 141...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 142...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 143...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 144...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 145...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 146...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 147...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 148...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
Training on data at index 149...
  Weight[0]: 0.20000 ---> 0.20000
  Weight[1]: 0.44886 ---> 0.44886
  Weight[2]: -4.86259 ---> -4.86259
```

Predictions: [1,
1,
1, 1, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.

Iteration 1

```
Out[6]: [0.19999999999999996, 0.4488602508560562, -4.8625901657422315]
```

Estimating input weight vector for class 1

```

In [7]: # For class 1

weights_1=[0.20,1.00,-1.00] # initializing weights

def predict(inputs,weights_1): # This function takes values of features (x0,
x1,x2)

    #one by one from dataset and weight vector as input and return the value
    according
    #to the definition of standard sigmoid function

    threshold = 0.0 # I have set the threshold as 0
    v = 0.0
    for input,weight in zip(inputs,weights_1):
        v += input*weight
    return 1 if v >= threshold else 0.0

def accuracy(matrix,weights_1): # This function gives the accuracy on the sc
ale of 0 to 1
    # in terms of how many points are correctly out of total number of data
    points

    num_correct=0.0 #initialized total correct points as 0
    preds=[]
    for i in range(len(matrix)):
        pred=predict(matrix[i][: -1],weights_1)
        preds.append(pred)
        if pred==vect[i][1]: num_correct += 1.0 #if data point is correctly
        classified then number of
        #correctly classified points are added by 1

    print("Predictions:",preds)
    return num_correct/float(len(matrix))

def train_weights(matrix,weights_1,iterations=1000,l_rate=1.0): # This funct
ion is to train weights
    #According to perceptron convergence theorem, after number of iteration
    s, maximum accuracy will be reached
    # and after that weight vector will not be changed. Since, generated dat
    a is of random numbers.
    #So, each time when we run the cell, dataset will be different and so, n
    umber of iterations
    #to get the estimated weight vector with accuracy 1.0 will be different
    and so accordingly you can change
    # the value of number of iterations.
    for epoch in range(iterations):
        cur_acc=accuracy(matrix,weights_1)
        print("\nIteration  %d \nWeights:  "%epoch,weights_1)
        print("Accuracy: ", cur_acc )
        if cur_acc==1.0 and True : break

        for i in range(len(matrix)):
            prediction = predict(matrix[i][: -1],weights_1)
            error = vect[i][1] - prediction #to get the difference between p
            redicted and actual class-label

            if True:
                print("Training on data at index %d..."%i)
                for j in range(len(weights_1)):
                    if True:
                        sys.stdout.write("\t Weight[%d]: %0.5f ---> "%(j,weights
                        _1[j]))
                        weights_1[j]= weights_1[j] + (l_rate*error*matrix[i][j]) # w
                        eight is modified
                        #according to the definition
                        if True: sys.stdout.write("%0.5f\n"%weights_1[j])
        print("\n Final estimated weight vector with accuracy %0.5f is:"%cur_ac

```

```
c)
    return weights_1
train_weights(data, weights_1=weights_1, iterations=1000, l_rate=1.0)
```

```
Predictions: [1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 0.0, 1,
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.0, 1, 1, 0.0, 1, 0.0, 1, 0.0, 1, 1, 0.0, 1, 1, 0.0, 0.0, 0.
0, 0.0, 1, 1, 1, 0.0, 1, 1, 1, 0.0, 0.0, 1, 1, 0.0, 0.0, 0.0, 1, 1, 0.0, 1,
1, 0.0, 1, 1, 1, 0.0, 1, 1, 1, 0.0, 0.0, 1, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]
```

```
Iteration 0
Weights: [0.2, 1.0, -1.0]
Accuracy: 0.54
Training on data at index 0...
  Weight[0]: 0.20000 ---> -0.80000
  Weight[1]: 1.00000 ---> 2.44276
  Weight[2]: -1.00000 ---> 1.79748
Training on data at index 1...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 2...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 3...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 4...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 5...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 6...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 7...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 8...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 9...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 10...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 11...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 12...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 13...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
```



```
Training on data at index 14...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 15...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 16...
  Weight[0]: -0.80000 ---> -1.80000
  Weight[1]: 2.44276 ---> 0.54980
  Weight[2]: 1.79748 ---> 2.63942
Training on data at index 17...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 18...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 19...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 20...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 21...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 22...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 23...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 24...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 25...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 26...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 27...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 28...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 29...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 30...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
```

```
Training on data at index 31...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 32...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 33...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 34...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 35...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 36...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 37...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 38...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 39...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 40...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 41...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 42...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 43...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 44...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 45...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 46...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 47...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
```

```
Training on data at index 48...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 49...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 50...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 51...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 52...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 53...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 54...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 55...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 56...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 57...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 58...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 59...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 60...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 61...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 62...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 63...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 64...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
```

```
Training on data at index 65...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 66...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 67...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 68...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 69...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 70...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 71...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 72...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 73...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 74...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 75...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 76...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 77...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 78...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 79...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 80...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 81...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
```

```
Training on data at index 82...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 83...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 84...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 85...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 86...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 87...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 88...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 89...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 90...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 91...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 92...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 93...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 94...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 95...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 96...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 97...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 98...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
```

```
Training on data at index 99...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 100...
  Weight[0]: -1.80000 ---> -2.80000
  Weight[1]: 0.54980 ---> 1.51864
  Weight[2]: 2.63942 ---> 0.12153
Training on data at index 101...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 102...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 103...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 104...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 105...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 106...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 107...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 108...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 109...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 110...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 111...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 112...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 113...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 114...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 115...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
```

```
Training on data at index 116...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 117...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 118...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 119...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 120...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 121...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 122...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 123...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 124...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 125...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 126...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 127...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 128...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 129...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 130...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 131...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 132...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
```

```
Training on data at index 133...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 134...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 135...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 136...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 137...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 138...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 139...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 140...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 141...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 142...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 143...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 144...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 145...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 146...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 147...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 148...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
Training on data at index 149...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: 1.51864 ---> 1.51864
  Weight[2]: 0.12153 ---> 0.12153
```



```
Iteration 1
Weights: [-2.8, 1.5186390719956138, 0.12152951736167461]
Accuracy: 0.98
Training on data at index 0...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 1...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 2...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 3...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 4...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 5...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 6...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 7...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 8...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 9...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 10...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 11...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 12...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 13...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
```

```
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 14...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 15...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 16...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 17...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 18...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 19...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 20...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 21...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 22...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 23...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 24...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 25...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 26...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.51864 ---> 1.51864
Weight[2]: 0.12153 ---> 0.12153
Training on data at index 27...
Weight[0]: -2.80000 ---> -3.80000
Weight[1]: 1.51864 ---> -1.11253
Weight[2]: 0.12153 ---> 3.60851
Training on data at index 28...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 29...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 30...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
```

```
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 31...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 32...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 33...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 34...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 35...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 36...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 37...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 38...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 39...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 40...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 41...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 42...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 43...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 44...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 45...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 46...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 47...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
```

```
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 48...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 49...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -1.11253 ---> -1.11253
Weight[2]: 3.60851 ---> 3.60851
Training on data at index 50...
Weight[0]: -3.80000 ---> -2.80000
Weight[1]: -1.11253 ---> 1.14764
Weight[2]: 3.60851 ---> 4.89975
Training on data at index 51...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 52...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 53...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 54...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 55...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 56...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 57...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 58...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 59...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 60...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 61...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 62...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 63...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 64...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
```

```
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 65...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 66...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 67...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 68...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 69...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 70...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 71...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 72...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 73...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 74...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 75...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 76...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 77...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 78...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 79...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 80...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 81...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
```

```
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 82...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 83...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 84...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 85...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 86...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 87...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 88...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 89...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 90...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 91...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 92...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 93...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 94...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 95...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 96...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 97...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 98...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
```

```
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 99...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: 1.14764 ---> 1.14764
Weight[2]: 4.89975 ---> 4.89975
Training on data at index 100...
Weight[0]: -2.80000 ---> -3.80000
Weight[1]: 1.14764 ---> 2.11648
Weight[2]: 4.89975 ---> 2.38187
Training on data at index 101...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: 2.11648 ---> 2.11648
Weight[2]: 2.38187 ---> 2.38187
Training on data at index 102...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: 2.11648 ---> 2.11648
Weight[2]: 2.38187 ---> 2.38187
Training on data at index 103...
Weight[0]: -3.80000 ---> -4.80000
Weight[1]: 2.11648 ---> 3.90646
Weight[2]: 2.38187 ---> -1.87385
Training on data at index 104...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 105...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 106...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 107...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 108...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 109...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 110...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 111...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 112...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 113...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 114...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 115...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
```

```
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 116...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 117...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 118...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 119...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 120...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 121...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 122...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 123...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 124...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 125...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 126...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 127...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 128...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 129...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 130...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 131...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 132...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
```



```
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 133...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 134...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 135...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 136...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 137...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 138...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 139...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 140...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 141...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 142...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 143...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 144...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 145...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 146...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 147...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 148...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 149...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
```

```
Weight[2]: -1.87385 ---> -1.87385
Predictions: [0.0, 0.0, 0.0, 0.0, 1, 1, 0.0, 1, 0.0, 1, 1, 1, 1, 0.0, 0.0, 0.
0, 1, 1, 0.0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 0.0, 1, 0.0, 0.0, 1,
0.0, 1, 1, 1, 1, 0.0, 0.0, 1, 1, 1, 1, 0.0, 1, 1, 1, 0.0, 0.0, 1, 0.0, 1, 0.
0, 1, 1, 0.0, 1, 1, 1, 0.0, 0.0, 1, 1, 0.0, 1, 0.0, 1, 1, 1, 0.0, 1, 1, 1, 0.
0, 1, 0.0, 1, 1, 0.0, 0.0, 1, 1, 1, 1, 1, 0.0, 1, 1, 1, 1, 0.0, 0.0, 1, 1, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0]
```

```
Iteration 2
Weights: [-4.8, 3.9064575176634584, -1.8738456652409479]
Accuracy: 0.6666666666666666
Training on data at index 0...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 1...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 2...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 3...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.90646 ---> 3.90646
Weight[2]: -1.87385 ---> -1.87385
Training on data at index 4...
Weight[0]: -4.80000 ---> -5.80000
Weight[1]: 3.90646 ---> 2.75028
Weight[2]: -1.87385 ---> 0.65812
Training on data at index 5...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 6...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 7...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 8...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 9...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 10...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 11...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 12...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 13...
Weight[0]: -5.80000 ---> -5.80000
```

```
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 14...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 15...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 16...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 17...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 18...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 19...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 20...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 21...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 22...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 23...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 24...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 25...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 26...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 27...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 28...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 29...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 30...
Weight[0]: -5.80000 ---> -5.80000
```

```
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 31...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 32...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 33...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 34...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 35...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 36...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 37...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 38...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 39...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 40...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 41...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 42...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 43...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 44...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 45...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 46...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 47...
Weight[0]: -5.80000 ---> -5.80000
```

```
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 48...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 49...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 50...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 51...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 52...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 53...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 54...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 55...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 56...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 57...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 58...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 59...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 60...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 61...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 62...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 63...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 64...
Weight[0]: -5.80000 ---> -5.80000
```

```
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 65...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 66...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 67...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 68...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 69...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 70...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 2.75028 ---> 2.75028
Weight[2]: 0.65812 ---> 0.65812
Training on data at index 71...
Weight[0]: -5.80000 ---> -4.80000
Weight[1]: 2.75028 ---> 3.81287
Weight[2]: 0.65812 ---> 3.23902
Training on data at index 72...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 73...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 74...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 75...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 76...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 77...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 78...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 79...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 80...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 81...
Weight[0]: -4.80000 ---> -4.80000
```

```
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 82...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 83...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 84...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 85...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 86...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 87...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 88...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 89...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 90...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 91...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 92...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 93...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 94...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 95...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 96...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 97...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 98...
Weight[0]: -4.80000 ---> -4.80000
```

```
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 99...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 100...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 101...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 102...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: 3.81287 ---> 3.81287
Weight[2]: 3.23902 ---> 3.23902
Training on data at index 103...
Weight[0]: -4.80000 ---> -5.80000
Weight[1]: 3.81287 ---> 5.60285
Weight[2]: 3.23902 ---> -1.01669
Training on data at index 104...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 105...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 106...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 107...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 108...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 109...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 110...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 111...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 112...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 113...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 114...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 115...
Weight[0]: -5.80000 ---> -5.80000
```



```
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 116...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 117...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 118...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 119...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 120...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 121...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 122...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 123...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 124...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 125...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 126...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 127...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 128...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 129...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 130...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 131...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 132...
Weight[0]: -5.80000 ---> -5.80000
```

```
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 133...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 134...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 135...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 136...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 137...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 138...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 139...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 140...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 141...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 142...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 143...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 144...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 145...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 146...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 147...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 148...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 149...
Weight[0]: -5.80000 ---> -5.80000
```

```
Iteration 3
Weights: [-5.8, 5.602846852228594, -1.0166875066234629]
Accuracy: 0.86
Training on data at index 0...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 1...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 2...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 3...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: 5.60285 ---> 5.60285
Weight[2]: -1.01669 ---> -1.01669
Training on data at index 4...
Weight[0]: -5.80000 ---> -6.80000
Weight[1]: 5.60285 ---> 4.44667
Weight[2]: -1.01669 ---> 1.51528
Training on data at index 5...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: 4.44667 ---> 4.44667
Weight[2]: 1.51528 ---> 1.51528
Training on data at index 6...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: 4.44667 ---> 4.44667
Weight[2]: 1.51528 ---> 1.51528
Training on data at index 7...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: 4.44667 ---> 4.44667
Weight[2]: 1.51528 ---> 1.51528
Training on data at index 8...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: 4.44667 ---> 4.44667
Weight[2]: 1.51528 ---> 1.51528
Training on data at index 9...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: 4.44667 ---> 4.44667
Weight[2]: 1.51528 ---> 1.51528
Training on data at index 10...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: 4.44667 ---> 4.44667
Weight[2]: 1.51528 ---> 1.51528
Training on data at index 11...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: 4.44667 ---> 4.44667
Weight[2]: 1.51528 ---> 1.51528
Training on data at index 12...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: 4.44667 ---> 4.44667
Weight[2]: 1.51528 ---> 1.51528
Training on data at index 13...
```

```
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: 4.44667 ---> 4.44667
Weight[2]: 1.51528 ---> 1.51528
Training on data at index 14...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: 4.44667 ---> 4.44667
Weight[2]: 1.51528 ---> 1.51528
Training on data at index 15...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: 4.44667 ---> 4.44667
Weight[2]: 1.51528 ---> 1.51528
Training on data at index 16...
Weight[0]: -6.80000 ---> -7.80000
Weight[1]: 4.44667 ---> 2.55371
Weight[2]: 1.51528 ---> 2.35721
Training on data at index 17...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 18...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 19...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 20...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 21...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 22...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 23...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 24...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 25...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 26...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 27...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 28...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 29...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 30...
```

```
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 31...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 32...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 33...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 34...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 35...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 36...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 37...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 38...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 39...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 40...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 41...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 42...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 43...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 44...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 45...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 46...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 47...
```

```
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 48...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 49...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 50...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 51...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 52...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 53...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 54...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 55...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 56...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 57...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 58...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 59...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 60...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 61...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 62...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 63...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 64...
```

```
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 65...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 66...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 67...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 68...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 69...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 70...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 71...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 72...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 73...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 74...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 75...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 76...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 77...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 78...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 79...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 80...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 81...
```

```
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 82...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 83...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 84...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 85...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 86...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 87...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 88...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 89...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 90...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 91...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 92...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 93...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 94...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 95...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 96...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 97...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 98...
```



```
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 99...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 100...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 101...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 102...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 103...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 104...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 105...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 106...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 107...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 108...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 109...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 110...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 111...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 112...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 113...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 114...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 115...
```

```
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 116...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 117...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 118...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 119...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 120...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 121...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 122...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 123...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 124...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 125...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 126...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 127...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 128...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 129...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 130...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 131...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 132...
```

```
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 133...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 134...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 135...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 136...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 137...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 138...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 139...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 140...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 141...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 142...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 143...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 144...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 145...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 146...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 147...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: 2.55371 ---> 2.55371
Weight[2]: 2.35721 ---> 2.35721
Training on data at index 148...
Weight[0]: -7.80000 ---> -8.80000
Weight[1]: 2.55371 ---> 4.56108
Weight[2]: 2.35721 ---> -3.59138
Training on data at index 149...
```

```
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: 4.56108 ---> 4.56108
Weight[2]: -3.59138 ---> -3.59138
Predictions: [0.0, 0.0, 0.0, 0.0, 1, 1, 1, 1, 0.0, 1, 1, 1, 1, 0.0, 0.0, 0.0,
1, 1, 0.0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 0.0, 1, 0.0, 0.0, 1, 1,
1, 1, 1, 1, 0.0, 0.0, 1, 1, 1, 1, 0.0, 0.0, 0.0, 1, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 1, 0.0, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 1, 0.
0, 0.0, 0.0, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 1, 1,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]
```

Iteration 4

Weights: [-8.8, 4.5610777874506745, -3.5913811894331444]

Accuracy: 0.4866666666666667

Training on data at index 0...

Weight[0]: -8.80000 ---> -8.80000

Weight[1]: 4.56108 ---> 4.56108

Weight[2]: -3.59138 ---> -3.59138

Training on data at index 1...

Weight[0]: -8.80000 ---> -8.80000

Weight[1]: 4.56108 ---> 4.56108

Weight[2]: -3.59138 ---> -3.59138

Training on data at index 2...

Weight[0]: -8.80000 ---> -8.80000

Weight[1]: 4.56108 ---> 4.56108

Weight[2]: -3.59138 ---> -3.59138

Training on data at index 3...

Weight[0]: -8.80000 ---> -8.80000

Weight[1]: 4.56108 ---> 4.56108

Weight[2]: -3.59138 ---> -3.59138

Training on data at index 4...

Weight[0]: -8.80000 ---> -9.80000

Weight[1]: 4.56108 ---> 3.40490

Weight[2]: -3.59138 ---> -1.05942

Training on data at index 5...

Weight[0]: -9.80000 ---> -9.80000

Weight[1]: 3.40490 ---> 3.40490

Weight[2]: -1.05942 ---> -1.05942

Training on data at index 6...

Weight[0]: -9.80000 ---> -9.80000

Weight[1]: 3.40490 ---> 3.40490

Weight[2]: -1.05942 ---> -1.05942

Training on data at index 7...

Weight[0]: -9.80000 ---> -9.80000

Weight[1]: 3.40490 ---> 3.40490

Weight[2]: -1.05942 ---> -1.05942

Training on data at index 8...

Weight[0]: -9.80000 ---> -9.80000

Weight[1]: 3.40490 ---> 3.40490

Weight[2]: -1.05942 ---> -1.05942

Training on data at index 9...

Weight[0]: -9.80000 ---> -9.80000

Weight[1]: 3.40490 ---> 3.40490

Weight[2]: -1.05942 ---> -1.05942

Training on data at index 10...

Weight[0]: -9.80000 ---> -9.80000

Weight[1]: 3.40490 ---> 3.40490

Weight[2]: -1.05942 ---> -1.05942

Training on data at index 11...

Weight[0]: -9.80000 ---> -9.80000

Weight[1]: 3.40490 ---> 3.40490

Weight[2]: -1.05942 ---> -1.05942

Training on data at index 12...

Weight[0]: -9.80000 ---> -9.80000

Weight[1]: 3.40490 ---> 3.40490

Weight[2]: -1.05942 ---> -1.05942

```
Training on data at index 13...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.40490 ---> 3.40490
  Weight[2]: -1.05942 ---> -1.05942
Training on data at index 14...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.40490 ---> 3.40490
  Weight[2]: -1.05942 ---> -1.05942
Training on data at index 15...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.40490 ---> 3.40490
  Weight[2]: -1.05942 ---> -1.05942
Training on data at index 16...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.40490 ---> 3.40490
  Weight[2]: -1.05942 ---> -1.05942
Training on data at index 17...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.40490 ---> 3.40490
  Weight[2]: -1.05942 ---> -1.05942
Training on data at index 18...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.40490 ---> 3.40490
  Weight[2]: -1.05942 ---> -1.05942
Training on data at index 19...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.40490 ---> 3.40490
  Weight[2]: -1.05942 ---> -1.05942
Training on data at index 20...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.40490 ---> 3.40490
  Weight[2]: -1.05942 ---> -1.05942
Training on data at index 21...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.40490 ---> 3.40490
  Weight[2]: -1.05942 ---> -1.05942
Training on data at index 22...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.40490 ---> 3.40490
  Weight[2]: -1.05942 ---> -1.05942
Training on data at index 23...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.40490 ---> 3.40490
  Weight[2]: -1.05942 ---> -1.05942
Training on data at index 24...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.40490 ---> 3.40490
  Weight[2]: -1.05942 ---> -1.05942
Training on data at index 25...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.40490 ---> 3.40490
  Weight[2]: -1.05942 ---> -1.05942
Training on data at index 26...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.40490 ---> 3.40490
  Weight[2]: -1.05942 ---> -1.05942
Training on data at index 27...
  Weight[0]: -9.80000 ---> -10.80000
  Weight[1]: 3.40490 ---> 0.77373
  Weight[2]: -1.05942 ---> 2.42756
Training on data at index 28...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 29...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
```

```
Training on data at index 30...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 31...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 32...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 33...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 34...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 35...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 36...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 37...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 38...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 39...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 40...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 41...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 42...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 43...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 44...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 45...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 46...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
```

```
Training on data at index 47...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 48...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 49...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 0.77373 ---> 0.77373
  Weight[2]: 2.42756 ---> 2.42756
Training on data at index 50...
  Weight[0]: -10.80000 ---> -9.80000
  Weight[1]: 0.77373 ---> 3.03390
  Weight[2]: 2.42756 ---> 3.71881
Training on data at index 51...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 52...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 53...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 54...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 55...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 56...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 57...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 58...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 59...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 60...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 61...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 62...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 63...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
```

```
Training on data at index 64...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 65...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 66...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 67...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 68...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 69...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 70...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 71...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 72...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 73...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 74...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 75...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 76...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 77...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 78...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 79...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 80...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
```



```
Training on data at index 81...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 82...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 83...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 84...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 85...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 86...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 87...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 88...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 89...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 90...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 91...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 92...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 93...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 94...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 95...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 96...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 97...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
```

```
Training on data at index 98...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 99...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 100...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 101...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 102...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: 3.03390 ---> 3.03390
  Weight[2]: 3.71881 ---> 3.71881
Training on data at index 103...
  Weight[0]: -9.80000 ---> -10.80000
  Weight[1]: 3.03390 ---> 4.82388
  Weight[2]: 3.71881 ---> -0.53690
Training on data at index 104...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 105...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 106...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 107...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 108...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 109...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 110...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 111...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 112...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 113...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 114...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
```

```
Training on data at index 115...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 116...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 117...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 118...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 119...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 120...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 121...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 122...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 123...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 124...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 125...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 126...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 127...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 128...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 129...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 130...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 131...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
```

```
Training on data at index 132...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 133...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 134...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 135...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 136...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 137...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 138...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 139...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 140...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 141...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 142...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 143...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 144...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 145...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 146...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 147...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
Training on data at index 148...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: 4.82388 ---> 4.82388
  Weight[2]: -0.53690 ---> -0.53690
```

```
Iteration 5
Weights: [-10.8, 4.823878418946668, -0.5369030780603743]
Accuracy: 0.8933333333333333
Training on data at index 0...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 1...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 2...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 3...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 4...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 5...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 6...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 7...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 8...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 9...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 10...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 11...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 12...
Weight[0]: -10.80000 ---> -10.80000
```

```
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 13...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 14...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 15...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 16...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 17...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 18...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 19...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 20...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 21...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 22...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 23...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 24...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 25...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 26...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.82388 ---> 4.82388
Weight[2]: -0.53690 ---> -0.53690
Training on data at index 27...
Weight[0]: -10.80000 ---> -11.80000
Weight[1]: 4.82388 ---> 2.19271
Weight[2]: -0.53690 ---> 2.95008
Training on data at index 28...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 29...
Weight[0]: -11.80000 ---> -11.80000
```

```
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 30...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 31...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 32...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 33...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 34...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 35...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 36...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 37...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 38...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 39...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 40...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 41...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 42...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 43...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 44...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 45...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 46...
Weight[0]: -11.80000 ---> -11.80000
```

```
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 47...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 48...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 49...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 2.19271 ---> 2.19271
Weight[2]: 2.95008 ---> 2.95008
Training on data at index 50...
Weight[0]: -11.80000 ---> -10.80000
Weight[1]: 2.19271 ---> 4.45288
Weight[2]: 2.95008 ---> 4.24132
Training on data at index 51...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 52...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 53...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 54...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 55...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 56...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 57...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 58...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 59...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 60...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 61...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 62...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 63...
Weight[0]: -10.80000 ---> -10.80000
```



```
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 64...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 65...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 66...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 67...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 68...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 69...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 70...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 71...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 72...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 73...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 74...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 75...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 76...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 77...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 78...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 79...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 80...
Weight[0]: -10.80000 ---> -10.80000
```

```
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 81...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 82...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 83...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 84...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 85...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 86...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 87...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 88...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 89...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 90...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 91...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 92...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 93...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 94...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 95...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 96...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 97...
Weight[0]: -10.80000 ---> -10.80000
```

```
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 98...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 99...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 100...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 101...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 102...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 103...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 104...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 105...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 106...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 107...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 108...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 109...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 110...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 111...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 112...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 113...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 114...
Weight[0]: -10.80000 ---> -10.80000
```

```
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 115...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 116...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 117...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 118...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 119...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 120...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 121...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 122...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 123...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 124...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 125...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 126...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 127...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 128...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 129...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 130...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 131...
Weight[0]: -10.80000 ---> -10.80000
```

```
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 132...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 133...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 134...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 135...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 136...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 137...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 138...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 139...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 140...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 141...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 142...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 143...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 144...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 145...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 146...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 147...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: 4.45288 ---> 4.45288
Weight[2]: 4.24132 ---> 4.24132
Training on data at index 148...
Weight[0]: -10.80000 ---> -11.80000
```

```

Iteration 6
Weights:  [-11.8, 6.460248638416748, -1.7072719213253755]
Accuracy: 0.86
Training on data at index 0...
  Weight[0]: -11.80000 ---> -11.80000
  Weight[1]: 6.46025 ---> 6.46025
  Weight[2]: -1.70727 ---> -1.70727
Training on data at index 1...
  Weight[0]: -11.80000 ---> -11.80000
  Weight[1]: 6.46025 ---> 6.46025
  Weight[2]: -1.70727 ---> -1.70727
Training on data at index 2...
  Weight[0]: -11.80000 ---> -11.80000
  Weight[1]: 6.46025 ---> 6.46025
  Weight[2]: -1.70727 ---> -1.70727
Training on data at index 3...
  Weight[0]: -11.80000 ---> -11.80000
  Weight[1]: 6.46025 ---> 6.46025
  Weight[2]: -1.70727 ---> -1.70727
Training on data at index 4...
  Weight[0]: -11.80000 ---> -11.80000
  Weight[1]: 6.46025 ---> 6.46025
  Weight[2]: -1.70727 ---> -1.70727
Training on data at index 5...
  Weight[0]: -11.80000 ---> -11.80000
  Weight[1]: 6.46025 ---> 6.46025
  Weight[2]: -1.70727 ---> -1.70727
Training on data at index 6...
  Weight[0]: -11.80000 ---> -11.80000
  Weight[1]: 6.46025 ---> 6.46025
  Weight[2]: -1.70727 ---> -1.70727
Training on data at index 7...
  Weight[0]: -11.80000 ---> -11.80000
  Weight[1]: 6.46025 ---> 6.46025
  Weight[2]: -1.70727 ---> -1.70727
Training on data at index 8...
  Weight[0]: -11.80000 ---> -11.80000
  Weight[1]: 6.46025 ---> 6.46025
  Weight[2]: -1.70727 ---> -1.70727
Training on data at index 9...
  Weight[0]: -11.80000 ---> -11.80000
  Weight[1]: 6.46025 ---> 6.46025
  Weight[2]: -1.70727 ---> -1.70727
Training on data at index 10...
  Weight[0]: -11.80000 ---> -11.80000
  Weight[1]: 6.46025 ---> 6.46025
  Weight[2]: -1.70727 ---> -1.70727
Training on data at index 11...
  Weight[0]: -11.80000 ---> -11.80000
  Weight[1]: 6.46025 ---> 6.46025
  Weight[2]: -1.70727 ---> -1.70727
Training on data at index 12...

```

```
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 6.46025 ---> 6.46025
Weight[2]: -1.70727 ---> -1.70727
Training on data at index 13...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 6.46025 ---> 6.46025
Weight[2]: -1.70727 ---> -1.70727
Training on data at index 14...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 6.46025 ---> 6.46025
Weight[2]: -1.70727 ---> -1.70727
Training on data at index 15...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: 6.46025 ---> 6.46025
Weight[2]: -1.70727 ---> -1.70727
Training on data at index 16...
Weight[0]: -11.80000 ---> -12.80000
Weight[1]: 6.46025 ---> 4.56729
Weight[2]: -1.70727 ---> -0.86534
Training on data at index 17...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.56729 ---> 4.56729
Weight[2]: -0.86534 ---> -0.86534
Training on data at index 18...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.56729 ---> 4.56729
Weight[2]: -0.86534 ---> -0.86534
Training on data at index 19...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.56729 ---> 4.56729
Weight[2]: -0.86534 ---> -0.86534
Training on data at index 20...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.56729 ---> 4.56729
Weight[2]: -0.86534 ---> -0.86534
Training on data at index 21...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.56729 ---> 4.56729
Weight[2]: -0.86534 ---> -0.86534
Training on data at index 22...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.56729 ---> 4.56729
Weight[2]: -0.86534 ---> -0.86534
Training on data at index 23...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.56729 ---> 4.56729
Weight[2]: -0.86534 ---> -0.86534
Training on data at index 24...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.56729 ---> 4.56729
Weight[2]: -0.86534 ---> -0.86534
Training on data at index 25...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.56729 ---> 4.56729
Weight[2]: -0.86534 ---> -0.86534
Training on data at index 26...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.56729 ---> 4.56729
Weight[2]: -0.86534 ---> -0.86534
Training on data at index 27...
Weight[0]: -12.80000 ---> -13.80000
Weight[1]: 4.56729 ---> 1.93612
Weight[2]: -0.86534 ---> 2.62164
Training on data at index 28...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 29...
```

```
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 30...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 31...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 32...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 33...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 34...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 35...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 36...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 37...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 38...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 39...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 40...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 41...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 42...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 43...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 44...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 45...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 46...
```



```
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 47...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 48...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 49...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 1.93612 ---> 1.93612
Weight[2]: 2.62164 ---> 2.62164
Training on data at index 50...
Weight[0]: -13.80000 ---> -12.80000
Weight[1]: 1.93612 ---> 4.19630
Weight[2]: 2.62164 ---> 3.91289
Training on data at index 51...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 52...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 53...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 54...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 55...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 56...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 57...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 58...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 59...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 60...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 61...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 62...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 63...
```

```
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 64...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 65...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 66...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 67...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 68...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 69...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 70...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 71...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 72...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 73...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 74...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 75...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 76...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 77...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 78...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 79...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 80...
```

```
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 81...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 82...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 83...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 84...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 85...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 86...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 87...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 88...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 89...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 90...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 91...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 92...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 93...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 94...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 95...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 96...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 97...
```

```
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 98...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 99...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 100...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 101...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 102...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 103...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 104...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 105...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 106...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 107...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 108...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 109...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 110...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 111...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 112...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 113...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 114...
```

```
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 115...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 116...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 117...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 118...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 119...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 120...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 121...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 122...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 123...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 124...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 125...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 126...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 127...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 128...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 129...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 130...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 131...
```

```
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 132...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 133...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 134...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 135...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 136...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 137...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 138...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 139...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 140...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 141...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 142...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 143...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 144...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 145...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 146...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 147...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: 4.19630 ---> 4.19630
Weight[2]: 3.91289 ---> 3.91289
Training on data at index 148...
```

```
Iteration 7
Weights: [-13.8, 6.203663254078815, -2.035705377378668]
Accuracy: 0.78
Training on data at index 0...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 1...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 2...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 3...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 4...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 5...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 6...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 7...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 8...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 9...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 10...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 11...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
```

```
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 12...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 13...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 14...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 15...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 16...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 17...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 18...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 19...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 20...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 21...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 6.20366 ---> 6.20366
Weight[2]: -2.03571 ---> -2.03571
Training on data at index 22...
Weight[0]: -13.80000 ---> -14.80000
Weight[1]: 6.20366 ---> 4.76472
Weight[2]: -2.03571 ---> 1.31110
Training on data at index 23...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 24...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 25...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 26...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 27...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 28...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
```



```
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 29...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 30...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 31...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 32...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 33...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 34...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 35...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 36...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 37...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 38...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 39...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 40...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 41...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 42...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 43...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 44...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 45...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
```

```
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 46...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 47...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 48...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 49...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: 4.76472 ---> 4.76472
Weight[2]: 1.31110 ---> 1.31110
Training on data at index 50...
Weight[0]: -14.80000 ---> -13.80000
Weight[1]: 4.76472 ---> 7.02490
Weight[2]: 1.31110 ---> 2.60234
Training on data at index 51...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 52...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 53...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 54...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 55...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 56...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 57...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 58...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 59...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 60...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 61...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 62...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
```

```
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 63...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 64...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 65...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 66...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 67...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 68...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 69...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 70...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 71...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 72...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 73...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 74...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 75...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 76...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 77...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 78...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 79...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
```

```
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 80...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 81...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 82...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 83...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 84...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 85...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 86...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 87...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 88...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 89...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 90...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 91...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 92...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 93...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 94...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 95...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 96...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
```

```
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 97...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 98...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 99...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 100...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 101...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 102...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 103...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 104...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 105...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 106...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 107...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 108...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 109...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 110...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 111...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 112...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 113...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
```

```
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 114...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 115...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 116...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 117...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 118...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 119...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 120...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 121...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 122...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 123...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 124...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 125...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 126...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 127...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 128...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 129...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 130...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
```

```
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 131...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 132...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 133...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 134...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 135...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 136...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 137...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 138...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 139...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 140...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 141...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 142...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 143...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Weight[2]: 2.60234 ---> 2.60234
Training on data at index 144...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: 7.02490 ---> 7.02490
Out[7]: [-13.8, 7.024901767464282, 2.602343077307117]
```

Estimating input weight vector for class 2

```

In [8]: # For class 2

weights_2=[0.20,1.00,-1.00] # initializing weights

def predict(inputs,weights_2): # This function takes values of features (x0,
x1,x2)

    #one by one from dataset and weight vector as input and return the value
    according
    #to the definition of standard sigmoid function

    threshold = 0.0 # I have set the threshold as 0
    v = 0.0
    for input,weight in zip(inputs,weights_2):
        v += input*weight
    return 1 if v >= threshold else 0.0

def accuracy(matrix,weights_2): # This function gives the accuracy on the scale of 0 to 1
    # in terms of how many points are correctly out of total number of data points

    num_correct=0.0 #initialized total correct points as 0
    preds=[]
    for i in range(len(matrix)):
        pred=predict(matrix[i][: -1],weights_2)
        preds.append(pred)
        if pred==vect[i][2]: num_correct += 1.0 #if data point is correctly
        classified then number of
        #correctly classified points are added by 1

    print("Predictions:",preds)
    return num_correct/float(len(matrix))

def train_weights(matrix,weights_2,iterations=1000,l_rate=1.0): # This function is to train weights
    #According to perceptron convergence theorem, after number of iterations, maximum accuracy will be reached
    # and after that weight vector will not be changed. Since, generated data is of random numbers.
    #So, each time when we run the cell, dataset will be different and so, number of iterations
    #to get the estimated weight vector with accuracy 1.0 will be different and so accordingly you can change
    # the value of number of iterations.
    for epoch in range(iterations):
        cur_acc=accuracy(matrix,weights_2)
        print("\nIteration %d \nWeights: "%epoch,weights_2)
        print("Accuracy: ", cur_acc )
        if cur_acc==1.0 and True : break

        for i in range(len(matrix)):
            prediction = predict(matrix[i][: -1],weights_2)
            error = vect[i][2] - prediction #to get the difference between predicted and actual class-label

            if True:
                print("Training on data at index %d..."%i)
                for j in range(len(weights_2)):
                    if True:
                        sys.stdout.write("\t Weight[%d]: %0.5f ---> "%(j,weights_2[j]))
                        weights_2[j]= weights_2[j] + (l_rate*error*matrix[i][j]) # weight is modified
                        #according to the definition
                        if True: sys.stdout.write("%0.5f\n"%weights_2[j])
        print("\n Final estimated weight vector with accuracy %0.5f is:"%cur_acc

```



```
c)
    return weights_2
train_weights(data, weights_2=weights_2, iterations=1000, l_rate=1.0)
```

```
Predictions: [1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 0.0, 1,
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 0.0, 1, 1, 0.0, 1, 0.0, 1, 0.0, 1, 1, 0.0, 1, 1, 0.0, 0.0, 0.
0, 0.0, 1, 1, 1, 0.0, 1, 1, 1, 0.0, 0.0, 1, 1, 0.0, 0.0, 0.0, 1, 1, 0.0, 1,
1, 0.0, 1, 1, 1, 0.0, 1, 1, 1, 0.0, 0.0, 1, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]
```

```
Iteration 0
Weights: [0.2, 1.0, -1.0]
Accuracy: 0.14
Training on data at index 0...
  Weight[0]: 0.20000 ---> -0.80000
  Weight[1]: 1.00000 ---> 2.44276
  Weight[2]: -1.00000 ---> 1.79748
Training on data at index 1...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 2...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 3...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 4...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 5...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 6...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 7...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 8...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 9...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 10...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 11...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 12...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 13...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
```

```
Training on data at index 14...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 15...
  Weight[0]: -0.80000 ---> -0.80000
  Weight[1]: 2.44276 ---> 2.44276
  Weight[2]: 1.79748 ---> 1.79748
Training on data at index 16...
  Weight[0]: -0.80000 ---> -1.80000
  Weight[1]: 2.44276 ---> 0.54980
  Weight[2]: 1.79748 ---> 2.63942
Training on data at index 17...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 18...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 19...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 20...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 21...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 22...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 23...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 24...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 25...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 26...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 27...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 28...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 29...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 30...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
```

```
Training on data at index 31...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 32...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 33...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 34...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 35...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 36...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 37...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 38...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 39...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 40...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 41...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 42...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 43...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 44...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 45...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 46...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 47...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
```

```
Training on data at index 48...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 49...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: 0.54980 ---> 0.54980
  Weight[2]: 2.63942 ---> 2.63942
Training on data at index 50...
  Weight[0]: -1.80000 ---> -2.80000
  Weight[1]: 0.54980 ---> -1.71038
  Weight[2]: 2.63942 ---> 1.34817
Training on data at index 51...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -1.71038 ---> -1.71038
  Weight[2]: 1.34817 ---> 1.34817
Training on data at index 52...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -1.71038 ---> -1.71038
  Weight[2]: 1.34817 ---> 1.34817
Training on data at index 53...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -1.71038 ---> -1.71038
  Weight[2]: 1.34817 ---> 1.34817
Training on data at index 54...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -1.71038 ---> -1.71038
  Weight[2]: 1.34817 ---> 1.34817
Training on data at index 55...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -1.71038 ---> -1.71038
  Weight[2]: 1.34817 ---> 1.34817
Training on data at index 56...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -1.71038 ---> -1.71038
  Weight[2]: 1.34817 ---> 1.34817
Training on data at index 57...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -1.71038 ---> -1.71038
  Weight[2]: 1.34817 ---> 1.34817
Training on data at index 58...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -1.71038 ---> -1.71038
  Weight[2]: 1.34817 ---> 1.34817
Training on data at index 59...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -1.71038 ---> -1.71038
  Weight[2]: 1.34817 ---> 1.34817
Training on data at index 60...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -1.71038 ---> -1.71038
  Weight[2]: 1.34817 ---> 1.34817
Training on data at index 61...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -1.71038 ---> -1.71038
  Weight[2]: 1.34817 ---> 1.34817
Training on data at index 62...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -1.71038 ---> -1.71038
  Weight[2]: 1.34817 ---> 1.34817
Training on data at index 63...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -1.71038 ---> -1.71038
  Weight[2]: 1.34817 ---> 1.34817
Training on data at index 64...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -1.71038 ---> -1.71038
  Weight[2]: 1.34817 ---> 1.34817
```

```
Training on data at index 65...
  Weight[0]: -2.80000 ---> -3.80000
  Weight[1]: -1.71038 ---> -2.81308
  Weight[2]: 1.34817 ---> -3.86876
Training on data at index 66...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 67...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 68...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 69...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 70...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 71...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 72...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 73...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 74...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 75...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 76...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 77...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 78...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 79...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 80...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 81...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
```

```
Training on data at index 82...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 83...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 84...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 85...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 86...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 87...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 88...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 89...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 90...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 91...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 92...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 93...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 94...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 95...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 96...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 97...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 98...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
```

```
Training on data at index 99...
  Weight[0]: -3.80000 ---> -3.80000
  Weight[1]: -2.81308 ---> -2.81308
  Weight[2]: -3.86876 ---> -3.86876
Training on data at index 100...
  Weight[0]: -3.80000 ---> -2.80000
  Weight[1]: -2.81308 ---> -3.78192
  Weight[2]: -3.86876 ---> -1.35087
Training on data at index 101...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -3.78192 ---> -3.78192
  Weight[2]: -1.35087 ---> -1.35087
Training on data at index 102...
  Weight[0]: -2.80000 ---> -2.80000
  Weight[1]: -3.78192 ---> -3.78192
  Weight[2]: -1.35087 ---> -1.35087
Training on data at index 103...
  Weight[0]: -2.80000 ---> -1.80000
  Weight[1]: -3.78192 ---> -5.57189
  Weight[2]: -1.35087 ---> 2.90485
Training on data at index 104...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 105...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 106...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 107...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 108...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 109...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 110...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 111...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 112...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 113...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 114...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 115...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
```



```
Training on data at index 116...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 117...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 118...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 119...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 120...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 121...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 122...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 123...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 124...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 125...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 126...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 127...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 128...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 129...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 130...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 131...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 132...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
```

```
Training on data at index 133...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 134...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 135...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 136...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 137...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 138...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 139...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 140...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 141...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 142...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 143...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 144...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 145...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 146...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 147...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 148...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
Training on data at index 149...
  Weight[0]: -1.80000 ---> -1.80000
  Weight[1]: -5.57189 ---> -5.57189
  Weight[2]: 2.90485 ---> 2.90485
```

```
Predictions: [0.0, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
1, 0.0, 0.0, 0.0, 0.0, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 1,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1]
```

Iteration 1

Weights: [-1.7999999999999998, -5.571891428950928, 2.9048450963158947]

Accuracy: 0.96

Training on data at index 0...

Weight[0]: -1.80000 ---> -1.80000

Weight[1]: -5.57189 ---> -5.57189

Weight[2]: 2.90485 ---> 2.90485

Training on data at index 1...

Weight[0]: -1.80000 ---> -2.80000

Weight[1]: -5.57189 ---> -2.80661

Weight[2]: 2.90485 ---> 6.70543

Training on data at index 2...

Weight[0]: -2.80000 ---> -2.80000

Weight[1]: -2.80661 ---> -2.80661

Weight[2]: 6.70543 ---> 6.70543

Training on data at index 3...

Weight[0]: -2.80000 ---> -2.80000

Weight[1]: -2.80661 ---> -2.80661

Weight[2]: 6.70543 ---> 6.70543

Training on data at index 4...

Weight[0]: -2.80000 ---> -2.80000

Weight[1]: -2.80661 ---> -2.80661

Weight[2]: 6.70543 ---> 6.70543

Training on data at index 5...

Weight[0]: -2.80000 ---> -2.80000

Weight[1]: -2.80661 ---> -2.80661

Weight[2]: 6.70543 ---> 6.70543

Training on data at index 6...

Weight[0]: -2.80000 ---> -2.80000

Weight[1]: -2.80661 ---> -2.80661

Weight[2]: 6.70543 ---> 6.70543

Training on data at index 7...

Weight[0]: -2.80000 ---> -2.80000

Weight[1]: -2.80661 ---> -2.80661

Weight[2]: 6.70543 ---> 6.70543

Training on data at index 8...

Weight[0]: -2.80000 ---> -2.80000

Weight[1]: -2.80661 ---> -2.80661

Weight[2]: 6.70543 ---> 6.70543

Training on data at index 9...

Weight[0]: -2.80000 ---> -2.80000

Weight[1]: -2.80661 ---> -2.80661

Weight[2]: 6.70543 ---> 6.70543

Training on data at index 10...

Weight[0]: -2.80000 ---> -2.80000

Weight[1]: -2.80661 ---> -2.80661

Weight[2]: 6.70543 ---> 6.70543

Training on data at index 11...

Weight[0]: -2.80000 ---> -2.80000

Weight[1]: -2.80661 ---> -2.80661

Weight[2]: 6.70543 ---> 6.70543

Training on data at index 12...

Weight[0]: -2.80000 ---> -2.80000

Weight[1]: -2.80661 ---> -2.80661

Weight[2]: 6.70543 ---> 6.70543

Training on data at index 13...

Weight[0]: -2.80000 ---> -2.80000

Weight[1]: -2.80661 ---> -2.80661

```
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 14...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 15...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 16...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 17...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 18...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 19...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 20...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 21...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 22...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 23...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 24...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 25...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 26...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 27...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 28...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 29...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 30...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
```

```
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 31...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 32...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 33...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 34...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 35...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 36...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 37...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 38...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 39...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 40...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 41...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 42...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 43...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 44...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 45...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 46...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 47...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
```

```
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 48...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 49...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 50...
Weight[0]: -2.80000 ---> -2.80000
Weight[1]: -2.80661 ---> -2.80661
Weight[2]: 6.70543 ---> 6.70543
Training on data at index 51...
Weight[0]: -2.80000 ---> -3.80000
Weight[1]: -2.80661 ---> -5.83208
Weight[2]: 6.70543 ---> 3.23061
Training on data at index 52...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -5.83208 ---> -5.83208
Weight[2]: 3.23061 ---> 3.23061
Training on data at index 53...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -5.83208 ---> -5.83208
Weight[2]: 3.23061 ---> 3.23061
Training on data at index 54...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -5.83208 ---> -5.83208
Weight[2]: 3.23061 ---> 3.23061
Training on data at index 55...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -5.83208 ---> -5.83208
Weight[2]: 3.23061 ---> 3.23061
Training on data at index 56...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -5.83208 ---> -5.83208
Weight[2]: 3.23061 ---> 3.23061
Training on data at index 57...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -5.83208 ---> -5.83208
Weight[2]: 3.23061 ---> 3.23061
Training on data at index 58...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -5.83208 ---> -5.83208
Weight[2]: 3.23061 ---> 3.23061
Training on data at index 59...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -5.83208 ---> -5.83208
Weight[2]: 3.23061 ---> 3.23061
Training on data at index 60...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -5.83208 ---> -5.83208
Weight[2]: 3.23061 ---> 3.23061
Training on data at index 61...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -5.83208 ---> -5.83208
Weight[2]: 3.23061 ---> 3.23061
Training on data at index 62...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -5.83208 ---> -5.83208
Weight[2]: 3.23061 ---> 3.23061
Training on data at index 63...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -5.83208 ---> -5.83208
Weight[2]: 3.23061 ---> 3.23061
Training on data at index 64...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -5.83208 ---> -5.83208
```

```
Weight[2]: 3.23061 ---> 3.23061
Training on data at index 65...
Weight[0]: -3.80000 ---> -4.80000
Weight[1]: -5.83208 ---> -6.93478
Weight[2]: 3.23061 ---> -1.98632
Training on data at index 66...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 67...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 68...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 69...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 70...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 71...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 72...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 73...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 74...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 75...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 76...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 77...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 78...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 79...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 80...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 81...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
```

```
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 82...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 83...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 84...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 85...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 86...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 87...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 88...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 89...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 90...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 91...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 92...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 93...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 94...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 95...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 96...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 97...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 98...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
```



```
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 99...
Weight[0]: -4.80000 ---> -4.80000
Weight[1]: -6.93478 ---> -6.93478
Weight[2]: -1.98632 ---> -1.98632
Training on data at index 100...
Weight[0]: -4.80000 ---> -3.80000
Weight[1]: -6.93478 ---> -7.90362
Weight[2]: -1.98632 ---> 0.53157
Training on data at index 101...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 102...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 103...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 104...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 105...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 106...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 107...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 108...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 109...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 110...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 111...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 112...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 113...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 114...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 115...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
```

```
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 116...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 117...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 118...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 119...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 120...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 121...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 122...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 123...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 124...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 125...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 126...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 127...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 128...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 129...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 130...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 131...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 132...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
```

```
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 133...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 134...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 135...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 136...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 137...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 138...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 139...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 140...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 141...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 142...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 143...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 144...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 145...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 146...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 147...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 148...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
Weight[2]: 0.53157 ---> 0.53157
Training on data at index 149...
Weight[0]: -3.80000 ---> -3.80000
Weight[1]: -7.90362 ---> -7.90362
```

```

Weight[2]: 0.53157 ---> 0.53157
Predictions: [1, 1, 0.0, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 1,
0.0, 1, 0.0, 0.0, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 1, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 1, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1, 1, 1, 1, 1]

```

Iteration 2

Weights: [-3.8, -7.903621547345351, 0.5315716249734113]

Accuracy: 0.94

Training on data at index 0...

Weight[0]: -3.80000 ---> -4.80000

Weight[1]: -7.90362 ---> -6.46087

Weight[2]: 0.53157 ---> 3.32905

Training on data at index 1...

Weight[0]: -4.80000 ---> -5.80000

Weight[1]: -6.46087 ---> -3.69558

Weight[2]: 3.32905 ---> 7.12964

Training on data at index 2...

Weight[0]: -5.80000 ---> -5.80000

Weight[1]: -3.69558 ---> -3.69558

Weight[2]: 7.12964 ---> 7.12964

Training on data at index 3...

Weight[0]: -5.80000 ---> -5.80000

Weight[1]: -3.69558 ---> -3.69558

Weight[2]: 7.12964 ---> 7.12964

Training on data at index 4...

Weight[0]: -5.80000 ---> -5.80000

Weight[1]: -3.69558 ---> -3.69558

Weight[2]: 7.12964 ---> 7.12964

Training on data at index 5...

Weight[0]: -5.80000 ---> -5.80000

Weight[1]: -3.69558 ---> -3.69558

Weight[2]: 7.12964 ---> 7.12964

Training on data at index 6...

Weight[0]: -5.80000 ---> -5.80000

Weight[1]: -3.69558 ---> -3.69558

Weight[2]: 7.12964 ---> 7.12964

Training on data at index 7...

Weight[0]: -5.80000 ---> -5.80000

Weight[1]: -3.69558 ---> -3.69558

Weight[2]: 7.12964 ---> 7.12964

Training on data at index 8...

Weight[0]: -5.80000 ---> -5.80000

Weight[1]: -3.69558 ---> -3.69558

Weight[2]: 7.12964 ---> 7.12964

Training on data at index 9...

Weight[0]: -5.80000 ---> -5.80000

Weight[1]: -3.69558 ---> -3.69558

Weight[2]: 7.12964 ---> 7.12964

Training on data at index 10...

Weight[0]: -5.80000 ---> -5.80000

Weight[1]: -3.69558 ---> -3.69558

Weight[2]: 7.12964 ---> 7.12964

Training on data at index 11...

Weight[0]: -5.80000 ---> -5.80000

Weight[1]: -3.69558 ---> -3.69558

Weight[2]: 7.12964 ---> 7.12964

Training on data at index 12...

Weight[0]: -5.80000 ---> -5.80000

Weight[1]: -3.69558 ---> -3.69558

Weight[2]: 7.12964 ---> 7.12964

Training on data at index 13...

Weight[0]: -5.80000 ---> -5.80000

```
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 14...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 15...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 16...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 17...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 18...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 19...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 20...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 21...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 22...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 23...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 24...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 25...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 26...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 27...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 28...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 29...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 30...
Weight[0]: -5.80000 ---> -5.80000
```

```
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 31...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 32...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 33...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 34...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 35...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 36...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 37...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 38...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 39...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 40...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 41...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 42...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 43...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 44...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 45...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 46...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 47...
Weight[0]: -5.80000 ---> -5.80000
```

```
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 48...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 49...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 50...
Weight[0]: -5.80000 ---> -5.80000
Weight[1]: -3.69558 ---> -3.69558
Weight[2]: 7.12964 ---> 7.12964
Training on data at index 51...
Weight[0]: -5.80000 ---> -6.80000
Weight[1]: -3.69558 ---> -6.72106
Weight[2]: 7.12964 ---> 3.65482
Training on data at index 52...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -6.72106 ---> -6.72106
Weight[2]: 3.65482 ---> 3.65482
Training on data at index 53...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -6.72106 ---> -6.72106
Weight[2]: 3.65482 ---> 3.65482
Training on data at index 54...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -6.72106 ---> -6.72106
Weight[2]: 3.65482 ---> 3.65482
Training on data at index 55...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -6.72106 ---> -6.72106
Weight[2]: 3.65482 ---> 3.65482
Training on data at index 56...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -6.72106 ---> -6.72106
Weight[2]: 3.65482 ---> 3.65482
Training on data at index 57...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -6.72106 ---> -6.72106
Weight[2]: 3.65482 ---> 3.65482
Training on data at index 58...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -6.72106 ---> -6.72106
Weight[2]: 3.65482 ---> 3.65482
Training on data at index 59...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -6.72106 ---> -6.72106
Weight[2]: 3.65482 ---> 3.65482
Training on data at index 60...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -6.72106 ---> -6.72106
Weight[2]: 3.65482 ---> 3.65482
Training on data at index 61...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -6.72106 ---> -6.72106
Weight[2]: 3.65482 ---> 3.65482
Training on data at index 62...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -6.72106 ---> -6.72106
Weight[2]: 3.65482 ---> 3.65482
Training on data at index 63...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -6.72106 ---> -6.72106
Weight[2]: 3.65482 ---> 3.65482
Training on data at index 64...
Weight[0]: -6.80000 ---> -6.80000
```

```
Weight[1]: -6.72106 ---> -6.72106
Weight[2]: 3.65482 ---> 3.65482
Training on data at index 65...
Weight[0]: -6.80000 ---> -7.80000
Weight[1]: -6.72106 ---> -7.82376
Weight[2]: 3.65482 ---> -1.56211
Training on data at index 66...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 67...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 68...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 69...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 70...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 71...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 72...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 73...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 74...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 75...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 76...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 77...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 78...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 79...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 80...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 81...
Weight[0]: -7.80000 ---> -7.80000
```



```
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 82...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 83...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 84...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 85...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 86...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 87...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 88...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 89...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 90...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 91...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 92...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 93...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 94...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 95...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 96...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 97...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 98...
Weight[0]: -7.80000 ---> -7.80000
```

```
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 99...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.82376 ---> -7.82376
Weight[2]: -1.56211 ---> -1.56211
Training on data at index 100...
Weight[0]: -7.80000 ---> -6.80000
Weight[1]: -7.82376 ---> -8.79260
Weight[2]: -1.56211 ---> 0.95578
Training on data at index 101...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 102...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 103...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 104...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 105...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 106...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 107...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 108...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 109...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 110...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 111...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 112...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 113...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 114...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 115...
Weight[0]: -6.80000 ---> -6.80000
```

```
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 116...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 117...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 118...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 119...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 120...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 121...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 122...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 123...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 124...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 125...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 126...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 127...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 128...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 129...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 130...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 131...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 132...
Weight[0]: -6.80000 ---> -6.80000
```

```
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 133...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 134...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 135...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 136...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 137...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 138...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 139...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 140...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 141...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 142...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 143...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 144...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 145...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 146...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 147...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 148...
Weight[0]: -6.80000 ---> -6.80000
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Training on data at index 149...
Weight[0]: -6.80000 ---> -6.80000
```

```
Weight[1]: -8.79260 ---> -8.79260
Weight[2]: 0.95578 ---> 0.95578
Predictions: [1, 1, 0.0, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 1,
0.0, 1, 0.0, 0.0, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 1, 1, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 1, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.
0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
1, 1, 1, 1, 1, 1, 1, 1, 1, 1]
```

Iteration 3

Weights: [-6.8, -8.79259649688089, 0.9557808018996825]

Accuracy: 0.94

Training on data at index 0...

Weight[0]: -6.80000 ---> -7.80000

Weight[1]: -8.79260 ---> -7.34984

Weight[2]: 0.95578 ---> 3.75326

Training on data at index 1...

Weight[0]: -7.80000 ---> -7.80000

Weight[1]: -7.34984 ---> -7.34984

Weight[2]: 3.75326 ---> 3.75326

Training on data at index 2...

Weight[0]: -7.80000 ---> -7.80000

Weight[1]: -7.34984 ---> -7.34984

Weight[2]: 3.75326 ---> 3.75326

Training on data at index 3...

Weight[0]: -7.80000 ---> -7.80000

Weight[1]: -7.34984 ---> -7.34984

Weight[2]: 3.75326 ---> 3.75326

Training on data at index 4...

Weight[0]: -7.80000 ---> -7.80000

Weight[1]: -7.34984 ---> -7.34984

Weight[2]: 3.75326 ---> 3.75326

Training on data at index 5...

Weight[0]: -7.80000 ---> -7.80000

Weight[1]: -7.34984 ---> -7.34984

Weight[2]: 3.75326 ---> 3.75326

Training on data at index 6...

Weight[0]: -7.80000 ---> -7.80000

Weight[1]: -7.34984 ---> -7.34984

Weight[2]: 3.75326 ---> 3.75326

Training on data at index 7...

Weight[0]: -7.80000 ---> -7.80000

Weight[1]: -7.34984 ---> -7.34984

Weight[2]: 3.75326 ---> 3.75326

Training on data at index 8...

Weight[0]: -7.80000 ---> -7.80000

Weight[1]: -7.34984 ---> -7.34984

Weight[2]: 3.75326 ---> 3.75326

Training on data at index 9...

Weight[0]: -7.80000 ---> -7.80000

Weight[1]: -7.34984 ---> -7.34984

Weight[2]: 3.75326 ---> 3.75326

Training on data at index 10...

Weight[0]: -7.80000 ---> -7.80000

Weight[1]: -7.34984 ---> -7.34984

Weight[2]: 3.75326 ---> 3.75326

Training on data at index 11...

Weight[0]: -7.80000 ---> -7.80000

Weight[1]: -7.34984 ---> -7.34984

Weight[2]: 3.75326 ---> 3.75326

Training on data at index 12...

Weight[0]: -7.80000 ---> -7.80000

Weight[1]: -7.34984 ---> -7.34984

Weight[2]: 3.75326 ---> 3.75326

Training on data at index 13...

```
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.34984 ---> -7.34984
Weight[2]: 3.75326 ---> 3.75326
Training on data at index 14...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.34984 ---> -7.34984
Weight[2]: 3.75326 ---> 3.75326
Training on data at index 15...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.34984 ---> -7.34984
Weight[2]: 3.75326 ---> 3.75326
Training on data at index 16...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.34984 ---> -7.34984
Weight[2]: 3.75326 ---> 3.75326
Training on data at index 17...
Weight[0]: -7.80000 ---> -7.80000
Weight[1]: -7.34984 ---> -7.34984
Weight[2]: 3.75326 ---> 3.75326
Training on data at index 18...
Weight[0]: -7.80000 ---> -8.80000
Weight[1]: -7.34984 ---> -4.48221
Weight[2]: 3.75326 ---> 5.83729
Training on data at index 19...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 20...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 21...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 22...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 23...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 24...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 25...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 26...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 27...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 28...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 29...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 30...
```

```
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 31...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 32...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 33...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 34...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 35...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 36...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 37...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 38...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 39...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 40...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 41...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 42...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 43...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 44...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 45...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 46...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 47...
```

```
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 48...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 49...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 50...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 51...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 52...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 53...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 54...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 55...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -4.48221 ---> -4.48221
Weight[2]: 5.83729 ---> 5.83729
Training on data at index 56...
Weight[0]: -8.80000 ---> -9.80000
Weight[1]: -4.48221 ---> -6.81938
Weight[2]: 5.83729 ---> 1.16574
Training on data at index 57...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 58...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 59...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 60...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 61...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 62...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 63...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 64...
```



```
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 65...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 66...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 67...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 68...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 69...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 70...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 71...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 72...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 73...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 74...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 75...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 76...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 77...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 78...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 79...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 80...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 81...
```

```
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 82...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 83...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 84...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 85...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 86...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 87...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 88...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 89...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 90...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 91...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 92...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 93...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 94...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 95...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 96...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 97...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 98...
```

```
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 99...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -6.81938 ---> -6.81938
Weight[2]: 1.16574 ---> 1.16574
Training on data at index 100...
Weight[0]: -9.80000 ---> -8.80000
Weight[1]: -6.81938 ---> -7.78822
Weight[2]: 1.16574 ---> 3.68363
Training on data at index 101...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 102...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 103...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 104...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 105...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 106...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 107...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 108...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 109...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 110...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 111...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 112...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 113...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 114...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 115...
```

```
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 116...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 117...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 118...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 119...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 120...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 121...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 122...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 123...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 124...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 125...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 126...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 127...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 128...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 129...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 130...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 131...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 132...
```

```
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 133...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 134...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 135...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 136...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 137...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 138...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 139...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 140...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 141...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 142...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 143...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 144...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 145...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 146...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 147...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 148...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 149...
```

```
Iteration 4
Weights: [-8.8, -7.788224453424506, 3.683631021937958]
Accuracy: 0.9866666666666667
Training on data at index 0...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 1...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 2...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 3...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 4...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 5...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 6...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 7...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 8...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 9...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 10...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 11...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
Training on data at index 12...
Weight[0]: -8.80000 ---> -8.80000
Weight[1]: -7.78822 ---> -7.78822
Weight[2]: 3.68363 ---> 3.68363
```

```
Training on data at index 13...
  Weight[0]: -8.80000 ---> -8.80000
  Weight[1]: -7.78822 ---> -7.78822
  Weight[2]: 3.68363 ---> 3.68363
Training on data at index 14...
  Weight[0]: -8.80000 ---> -8.80000
  Weight[1]: -7.78822 ---> -7.78822
  Weight[2]: 3.68363 ---> 3.68363
Training on data at index 15...
  Weight[0]: -8.80000 ---> -8.80000
  Weight[1]: -7.78822 ---> -7.78822
  Weight[2]: 3.68363 ---> 3.68363
Training on data at index 16...
  Weight[0]: -8.80000 ---> -8.80000
  Weight[1]: -7.78822 ---> -7.78822
  Weight[2]: 3.68363 ---> 3.68363
Training on data at index 17...
  Weight[0]: -8.80000 ---> -8.80000
  Weight[1]: -7.78822 ---> -7.78822
  Weight[2]: 3.68363 ---> 3.68363
Training on data at index 18...
  Weight[0]: -8.80000 ---> -9.80000
  Weight[1]: -7.78822 ---> -4.92059
  Weight[2]: 3.68363 ---> 5.76765
Training on data at index 19...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 20...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 21...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 22...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 23...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 24...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 25...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 26...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 27...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 28...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 29...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
```

```
Training on data at index 30...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 31...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 32...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 33...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 34...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 35...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 36...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 37...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 38...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 39...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 40...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 41...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 42...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 43...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 44...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 45...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 46...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
```



```
Training on data at index 47...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 48...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 49...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 50...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 51...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 52...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 53...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 54...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 55...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -4.92059 ---> -4.92059
  Weight[2]: 5.76765 ---> 5.76765
Training on data at index 56...
  Weight[0]: -9.80000 ---> -10.80000
  Weight[1]: -4.92059 ---> -7.25777
  Weight[2]: 5.76765 ---> 1.09611
Training on data at index 57...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 58...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 59...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 60...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 61...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 62...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 63...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
```

```
Training on data at index 64...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 65...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 66...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 67...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 68...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 69...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 70...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 71...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 72...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 73...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 74...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 75...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 76...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 77...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 78...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 79...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 80...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
```

```
Training on data at index 81...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 82...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 83...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 84...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 85...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 86...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 87...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 88...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 89...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 90...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 91...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 92...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 93...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 94...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 95...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 96...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 97...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
```

```
Training on data at index 98...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 99...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -7.25777 ---> -7.25777
  Weight[2]: 1.09611 ---> 1.09611
Training on data at index 100...
  Weight[0]: -10.80000 ---> -9.80000
  Weight[1]: -7.25777 ---> -8.22661
  Weight[2]: 1.09611 ---> 3.61400
Training on data at index 101...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 102...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 103...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 104...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 105...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 106...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 107...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 108...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 109...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 110...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 111...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 112...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 113...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 114...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
```

```
Training on data at index 115...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 116...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 117...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 118...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 119...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 120...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 121...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 122...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 123...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 124...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 125...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 126...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 127...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 128...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 129...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 130...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 131...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
```

```
Training on data at index 132...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 133...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 134...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 135...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 136...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 137...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 138...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 139...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 140...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 141...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 142...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 143...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 144...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 145...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 146...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 147...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
Training on data at index 148...
  Weight[0]: -9.80000 ---> -9.80000
  Weight[1]: -8.22661 ---> -8.22661
  Weight[2]: 3.61400 ---> 3.61400
```

```
Iteration 5
Weights: [-9.8, -8.226607578827007, 3.6139985937074792]
Accuracy: 0.9933333333333333
Training on data at index 0...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 1...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 2...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 3...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 4...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 5...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 6...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 7...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 8...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 9...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 10...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 11...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 12...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
```

```
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 13...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 14...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 15...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 16...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 17...
Weight[0]: -9.80000 ---> -9.80000
Weight[1]: -8.22661 ---> -8.22661
Weight[2]: 3.61400 ---> 3.61400
Training on data at index 18...
Weight[0]: -9.80000 ---> -10.80000
Weight[1]: -8.22661 ---> -5.35898
Weight[2]: 3.61400 ---> 5.69802
Training on data at index 19...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 20...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 21...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 22...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 23...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 24...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 25...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 26...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 27...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 28...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 29...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
```



```
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 30...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 31...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 32...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 33...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 34...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 35...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 36...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 37...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 38...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 39...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 40...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 41...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 42...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 43...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 44...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 45...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 46...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
```

```
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 47...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 48...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 49...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 50...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 51...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 52...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 53...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 54...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 55...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -5.35898 ---> -5.35898
Weight[2]: 5.69802 ---> 5.69802
Training on data at index 56...
Weight[0]: -10.80000 ---> -11.80000
Weight[1]: -5.35898 ---> -7.69615
Weight[2]: 5.69802 ---> 1.02648
Training on data at index 57...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 58...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 59...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 60...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 61...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 62...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 63...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
```

```
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 64...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 65...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 66...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 67...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 68...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 69...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 70...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 71...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 72...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 73...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 74...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 75...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 76...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 77...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 78...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 79...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 80...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
```

```
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 81...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 82...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 83...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 84...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 85...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 86...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 87...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 88...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 89...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 90...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 91...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 92...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 93...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 94...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 95...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 96...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 97...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
```

```
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 98...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 99...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -7.69615 ---> -7.69615
Weight[2]: 1.02648 ---> 1.02648
Training on data at index 100...
Weight[0]: -11.80000 ---> -10.80000
Weight[1]: -7.69615 ---> -8.66499
Weight[2]: 1.02648 ---> 3.54437
Training on data at index 101...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 102...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 103...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 104...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 105...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 106...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 107...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 108...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 109...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 110...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 111...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 112...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 113...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 114...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
```

```
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 115...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 116...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 117...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 118...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 119...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 120...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 121...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 122...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 123...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 124...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 125...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 126...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 127...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 128...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 129...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 130...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 131...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
```

```
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 132...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 133...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 134...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 135...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 136...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 137...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 138...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 139...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 140...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 141...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 142...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 143...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 144...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 145...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 146...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 147...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 148...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
```

```

Iteration 6
Weights:  [-10.8, -8.664990704229508, 3.5443661654770002]
Accuracy: 0.9933333333333333
Training on data at index 0...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -8.66499 ---> -8.66499
  Weight[2]: 3.54437 ---> 3.54437
Training on data at index 1...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -8.66499 ---> -8.66499
  Weight[2]: 3.54437 ---> 3.54437
Training on data at index 2...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -8.66499 ---> -8.66499
  Weight[2]: 3.54437 ---> 3.54437
Training on data at index 3...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -8.66499 ---> -8.66499
  Weight[2]: 3.54437 ---> 3.54437
Training on data at index 4...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -8.66499 ---> -8.66499
  Weight[2]: 3.54437 ---> 3.54437
Training on data at index 5...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -8.66499 ---> -8.66499
  Weight[2]: 3.54437 ---> 3.54437
Training on data at index 6...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -8.66499 ---> -8.66499
  Weight[2]: 3.54437 ---> 3.54437
Training on data at index 7...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -8.66499 ---> -8.66499
  Weight[2]: 3.54437 ---> 3.54437
Training on data at index 8...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -8.66499 ---> -8.66499
  Weight[2]: 3.54437 ---> 3.54437
Training on data at index 9...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -8.66499 ---> -8.66499
  Weight[2]: 3.54437 ---> 3.54437
Training on data at index 10...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -8.66499 ---> -8.66499
  Weight[2]: 3.54437 ---> 3.54437
Training on data at index 11...
  Weight[0]: -10.80000 ---> -10.80000
  Weight[1]: -8.66499 ---> -8.66499
  Weight[2]: 3.54437 ---> 3.54437
Training on data at index 12...
  Weight[0]: -10.80000 ---> -10.80000

```



```
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 13...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 14...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 15...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 16...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 17...
Weight[0]: -10.80000 ---> -10.80000
Weight[1]: -8.66499 ---> -8.66499
Weight[2]: 3.54437 ---> 3.54437
Training on data at index 18...
Weight[0]: -10.80000 ---> -11.80000
Weight[1]: -8.66499 ---> -5.79736
Weight[2]: 3.54437 ---> 5.62839
Training on data at index 19...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 20...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 21...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 22...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 23...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 24...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 25...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 26...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 27...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 28...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 29...
Weight[0]: -11.80000 ---> -11.80000
```

```
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 30...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 31...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 32...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 33...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 34...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 35...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 36...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 37...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 38...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 39...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 40...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 41...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 42...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 43...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 44...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 45...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 46...
Weight[0]: -11.80000 ---> -11.80000
```

```
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 47...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 48...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 49...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 50...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 51...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 52...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 53...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 54...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 55...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -5.79736 ---> -5.79736
Weight[2]: 5.62839 ---> 5.62839
Training on data at index 56...
Weight[0]: -11.80000 ---> -12.80000
Weight[1]: -5.79736 ---> -8.13453
Weight[2]: 5.62839 ---> 0.95685
Training on data at index 57...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 58...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 59...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 60...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 61...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 62...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 63...
Weight[0]: -12.80000 ---> -12.80000
```

```
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 64...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 65...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 66...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 67...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 68...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 69...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 70...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 71...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 72...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 73...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 74...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 75...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 76...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 77...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 78...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 79...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 80...
Weight[0]: -12.80000 ---> -12.80000
```

```
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 81...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 82...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 83...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 84...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 85...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 86...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 87...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 88...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 89...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 90...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 91...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 92...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 93...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 94...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 95...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 96...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 97...
Weight[0]: -12.80000 ---> -12.80000
```

```
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 98...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 99...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -8.13453 ---> -8.13453
Weight[2]: 0.95685 ---> 0.95685
Training on data at index 100...
Weight[0]: -12.80000 ---> -11.80000
Weight[1]: -8.13453 ---> -9.10337
Weight[2]: 0.95685 ---> 3.47473
Training on data at index 101...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 102...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 103...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 104...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 105...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 106...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 107...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 108...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 109...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 110...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 111...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 112...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 113...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 114...
Weight[0]: -11.80000 ---> -11.80000
```

```
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 115...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 116...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 117...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 118...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 119...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 120...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 121...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 122...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 123...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 124...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 125...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 126...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 127...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 128...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 129...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 130...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 131...
Weight[0]: -11.80000 ---> -11.80000
```

```
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 132...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 133...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 134...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 135...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 136...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 137...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 138...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 139...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 140...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 141...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 142...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 143...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 144...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 145...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 146...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 147...
Weight[0]: -11.80000 ---> -11.80000
Weight[1]: -9.10337 ---> -9.10337
Weight[2]: 3.47473 ---> 3.47473
Training on data at index 148...
Weight[0]: -11.80000 ---> -11.80000
```



```

Iteration 7
Weights: [-11.8, -9.103373829632009, 3.4747337372465212]
Accuracy: 0.9866666666666667
Training on data at index 0...
  Weight[0]: -11.80000 ---> -11.80000
  Weight[1]: -9.10337 ---> -9.10337
  Weight[2]: 3.47473 ---> 3.47473
Training on data at index 1...
  Weight[0]: -11.80000 ---> -12.80000
  Weight[1]: -9.10337 ---> -6.33809
  Weight[2]: 3.47473 ---> 7.27532
Training on data at index 2...
  Weight[0]: -12.80000 ---> -12.80000
  Weight[1]: -6.33809 ---> -6.33809
  Weight[2]: 7.27532 ---> 7.27532
Training on data at index 3...
  Weight[0]: -12.80000 ---> -12.80000
  Weight[1]: -6.33809 ---> -6.33809
  Weight[2]: 7.27532 ---> 7.27532
Training on data at index 4...
  Weight[0]: -12.80000 ---> -12.80000
  Weight[1]: -6.33809 ---> -6.33809
  Weight[2]: 7.27532 ---> 7.27532
Training on data at index 5...
  Weight[0]: -12.80000 ---> -12.80000
  Weight[1]: -6.33809 ---> -6.33809
  Weight[2]: 7.27532 ---> 7.27532
Training on data at index 6...
  Weight[0]: -12.80000 ---> -12.80000
  Weight[1]: -6.33809 ---> -6.33809
  Weight[2]: 7.27532 ---> 7.27532
Training on data at index 7...
  Weight[0]: -12.80000 ---> -12.80000
  Weight[1]: -6.33809 ---> -6.33809
  Weight[2]: 7.27532 ---> 7.27532
Training on data at index 8...
  Weight[0]: -12.80000 ---> -12.80000
  Weight[1]: -6.33809 ---> -6.33809
  Weight[2]: 7.27532 ---> 7.27532
Training on data at index 9...
  Weight[0]: -12.80000 ---> -12.80000
  Weight[1]: -6.33809 ---> -6.33809
  Weight[2]: 7.27532 ---> 7.27532
Training on data at index 10...
  Weight[0]: -12.80000 ---> -12.80000
  Weight[1]: -6.33809 ---> -6.33809
  Weight[2]: 7.27532 ---> 7.27532
Training on data at index 11...
  Weight[0]: -12.80000 ---> -12.80000
  Weight[1]: -6.33809 ---> -6.33809
  Weight[2]: 7.27532 ---> 7.27532
Training on data at index 12...

```

```
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 13...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 14...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 15...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 16...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 17...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 18...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 19...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 20...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 21...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 22...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 23...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 24...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 25...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 26...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 27...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 28...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 29...
```

```
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 30...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 31...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 32...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 33...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 34...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 35...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 36...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 37...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 38...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 39...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 40...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 41...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 42...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 43...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 44...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 45...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 46...
```

```
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 47...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 48...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 49...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 50...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 51...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 52...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 53...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 54...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 55...
Weight[0]: -12.80000 ---> -12.80000
Weight[1]: -6.33809 ---> -6.33809
Weight[2]: 7.27532 ---> 7.27532
Training on data at index 56...
Weight[0]: -12.80000 ---> -13.80000
Weight[1]: -6.33809 ---> -8.67526
Weight[2]: 7.27532 ---> 2.60377
Training on data at index 57...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 58...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 59...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 60...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 61...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 62...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 63...
```

```
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 64...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 65...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 66...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 67...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 68...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 69...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 70...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 71...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 72...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 73...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 74...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 75...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 76...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 77...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 78...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 79...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 80...
```

```
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 81...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 82...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 83...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 84...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 85...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 86...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 87...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 88...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 89...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 90...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 91...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 92...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 93...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 94...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 95...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 96...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 97...
```

```
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 98...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 99...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 100...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 101...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 102...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 103...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 104...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 105...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 106...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 107...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 108...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 109...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 110...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 111...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 112...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 113...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 114...
```

```
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 115...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 116...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 117...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 118...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 119...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 120...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 121...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 122...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 123...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 124...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 125...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 126...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 127...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 128...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 129...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 130...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 131...
```



```
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 132...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 133...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 134...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 135...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 136...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 137...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 138...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 139...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 140...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 141...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 142...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 143...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 144...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 145...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 146...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 147...
Weight[0]: -13.80000 ---> -13.80000
Weight[1]: -8.67526 ---> -8.67526
Weight[2]: 2.60377 ---> 2.60377
Training on data at index 148...
```

```

Iteration 8
Weights:  [-13.8, -8.675263770671755, 2.603772555106643]
Accuracy:  0.9866666666666667
Training on data at index 0...
  Weight[0]: -13.80000 ---> -13.80000
  Weight[1]: -8.67526 ---> -8.67526
  Weight[2]: 2.60377 ---> 2.60377
Training on data at index 1...
  Weight[0]: -13.80000 ---> -14.80000
  Weight[1]: -8.67526 ---> -5.90998
  Weight[2]: 2.60377 ---> 6.40436
Training on data at index 2...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 3...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 4...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 5...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 6...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 7...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 8...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 9...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 10...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 11...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436

```

```
Training on data at index 12...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 13...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 14...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 15...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 16...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 17...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 18...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 19...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 20...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 21...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 22...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 23...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 24...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 25...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 26...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 27...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 28...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
```

```
Training on data at index 29...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 30...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 31...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 32...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 33...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 34...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 35...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 36...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 37...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 38...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 39...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 40...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 41...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 42...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 43...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 44...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 45...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
```

```
Training on data at index 46...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 47...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 48...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 49...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 50...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 51...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 52...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 53...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 54...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 55...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -5.90998 ---> -5.90998
  Weight[2]: 6.40436 ---> 6.40436
Training on data at index 56...
  Weight[0]: -14.80000 ---> -15.80000
  Weight[1]: -5.90998 ---> -8.24715
  Weight[2]: 6.40436 ---> 1.73281
Training on data at index 57...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 58...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 59...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 60...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 61...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 62...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
```

```
Training on data at index 63...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 64...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 65...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 66...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 67...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 68...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 69...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 70...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 71...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 72...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 73...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 74...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 75...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 76...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 77...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 78...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 79...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
```

```
Training on data at index 80...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 81...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 82...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 83...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 84...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 85...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 86...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 87...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 88...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 89...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 90...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 91...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 92...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 93...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 94...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 95...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 96...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
```

```
Training on data at index 97...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 98...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 99...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.24715 ---> -8.24715
  Weight[2]: 1.73281 ---> 1.73281
Training on data at index 100...
  Weight[0]: -15.80000 ---> -14.80000
  Weight[1]: -8.24715 ---> -9.21599
  Weight[2]: 1.73281 ---> 4.25070
Training on data at index 101...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 102...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 103...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 104...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 105...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 106...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 107...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 108...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 109...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 110...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 111...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 112...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 113...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
```



```
Training on data at index 114...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 115...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 116...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 117...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 118...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 119...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 120...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 121...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 122...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 123...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 124...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 125...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 126...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 127...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 128...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 129...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 130...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
```

```
Training on data at index 131...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 132...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 133...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 134...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 135...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 136...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 137...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 138...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 139...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 140...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 141...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 142...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 143...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 144...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 145...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 146...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
Training on data at index 147...
  Weight[0]: -14.80000 ---> -14.80000
  Weight[1]: -9.21599 ---> -9.21599
  Weight[2]: 4.25070 ---> 4.25070
```

```

Iteration 9
Weights: [-14.8, -9.215993218656244, 4.250699891893596]
Accuracy: 0.9933333333333333
Training on data at index 0...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 1...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 2...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 3...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 4...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 5...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 6...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 7...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 8...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 9...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 10...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 11...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599

```

```
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 12...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 13...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 14...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 15...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 16...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 17...
Weight[0]: -14.80000 ---> -14.80000
Weight[1]: -9.21599 ---> -9.21599
Weight[2]: 4.25070 ---> 4.25070
Training on data at index 18...
Weight[0]: -14.80000 ---> -15.80000
Weight[1]: -9.21599 ---> -6.34836
Weight[2]: 4.25070 ---> 6.33472
Training on data at index 19...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 20...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 21...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 22...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 23...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 24...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 25...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 26...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 27...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 28...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
```

```
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 29...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 30...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 31...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 32...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 33...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 34...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 35...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 36...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 37...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 38...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 39...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 40...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 41...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 42...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 43...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 44...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 45...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
```

```
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 46...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 47...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 48...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 49...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 50...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 51...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 52...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 53...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 54...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 55...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 56...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 57...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 58...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 59...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 60...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 61...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 62...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
```

```
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 63...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 64...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -6.34836 ---> -6.34836
Weight[2]: 6.33472 ---> 6.33472
Training on data at index 65...
Weight[0]: -15.80000 ---> -16.80000
Weight[1]: -6.34836 ---> -7.45106
Weight[2]: 6.33472 ---> 1.11780
Training on data at index 66...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 67...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 68...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 69...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 70...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 71...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 72...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 73...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 74...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 75...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 76...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 77...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 78...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 79...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
```

```
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 80...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 81...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 82...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 83...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 84...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 85...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 86...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 87...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 88...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 89...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 90...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 91...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 92...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 93...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 94...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 95...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 96...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
```



```
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 97...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 98...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 99...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.45106 ---> -7.45106
Weight[2]: 1.11780 ---> 1.11780
Training on data at index 100...
Weight[0]: -16.80000 ---> -15.80000
Weight[1]: -7.45106 ---> -8.41990
Weight[2]: 1.11780 ---> 3.63568
Training on data at index 101...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 102...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 103...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 104...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 105...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 106...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 107...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 108...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 109...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 110...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 111...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 112...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 113...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
```

```
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 114...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 115...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 116...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 117...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 118...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 119...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 120...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 121...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 122...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 123...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 124...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 125...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 126...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 127...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 128...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 129...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 130...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
```

```
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 131...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 132...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 133...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 134...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 135...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 136...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 137...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 138...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 139...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 140...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 141...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 142...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 143...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 144...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 145...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 146...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 147...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
```

```

Iteration 10
Weights: [-15.8, -8.41990268350556, 3.635684188930745]
Accuracy: 0.9933333333333333
Training on data at index 0...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.41990 ---> -8.41990
  Weight[2]: 3.63568 ---> 3.63568
Training on data at index 1...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.41990 ---> -8.41990
  Weight[2]: 3.63568 ---> 3.63568
Training on data at index 2...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.41990 ---> -8.41990
  Weight[2]: 3.63568 ---> 3.63568
Training on data at index 3...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.41990 ---> -8.41990
  Weight[2]: 3.63568 ---> 3.63568
Training on data at index 4...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.41990 ---> -8.41990
  Weight[2]: 3.63568 ---> 3.63568
Training on data at index 5...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.41990 ---> -8.41990
  Weight[2]: 3.63568 ---> 3.63568
Training on data at index 6...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.41990 ---> -8.41990
  Weight[2]: 3.63568 ---> 3.63568
Training on data at index 7...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.41990 ---> -8.41990
  Weight[2]: 3.63568 ---> 3.63568
Training on data at index 8...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.41990 ---> -8.41990
  Weight[2]: 3.63568 ---> 3.63568
Training on data at index 9...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.41990 ---> -8.41990
  Weight[2]: 3.63568 ---> 3.63568
Training on data at index 10...
  Weight[0]: -15.80000 ---> -15.80000
  Weight[1]: -8.41990 ---> -8.41990
  Weight[2]: 3.63568 ---> 3.63568
Training on data at index 11...
  Weight[0]: -15.80000 ---> -15.80000

```

```
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 12...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 13...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 14...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 15...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 16...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 17...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -8.41990 ---> -8.41990
Weight[2]: 3.63568 ---> 3.63568
Training on data at index 18...
Weight[0]: -15.80000 ---> -16.80000
Weight[1]: -8.41990 ---> -5.55227
Weight[2]: 3.63568 ---> 5.71971
Training on data at index 19...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 20...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 21...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 22...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 23...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 24...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 25...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 26...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 27...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 28...
Weight[0]: -16.80000 ---> -16.80000
```

```
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 29...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 30...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 31...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 32...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 33...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 34...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 35...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 36...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 37...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 38...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 39...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 40...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 41...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 42...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 43...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 44...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 45...
Weight[0]: -16.80000 ---> -16.80000
```

```
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 46...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 47...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 48...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 49...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 50...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 51...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 52...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 53...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 54...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 55...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 56...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 57...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 58...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 59...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 60...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 61...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 62...
Weight[0]: -16.80000 ---> -16.80000
```

```
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 63...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 64...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -5.55227 ---> -5.55227
Weight[2]: 5.71971 ---> 5.71971
Training on data at index 65...
Weight[0]: -16.80000 ---> -17.80000
Weight[1]: -5.55227 ---> -6.65497
Weight[2]: 5.71971 ---> 0.50278
Training on data at index 66...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 67...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 68...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 69...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 70...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 71...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 72...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 73...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 74...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 75...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 76...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 77...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 78...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 79...
Weight[0]: -17.80000 ---> -17.80000
```



```
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 80...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 81...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 82...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 83...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 84...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 85...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 86...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 87...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 88...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 89...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 90...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 91...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 92...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 93...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 94...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 95...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 96...
Weight[0]: -17.80000 ---> -17.80000
```

```
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 97...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 98...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 99...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -6.65497 ---> -6.65497
Weight[2]: 0.50278 ---> 0.50278
Training on data at index 100...
Weight[0]: -17.80000 ---> -16.80000
Weight[1]: -6.65497 ---> -7.62381
Weight[2]: 0.50278 ---> 3.02067
Training on data at index 101...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -7.62381 ---> -7.62381
Weight[2]: 3.02067 ---> 3.02067
Training on data at index 102...
Weight[0]: -16.80000 ---> -15.80000
Weight[1]: -7.62381 ---> -9.20501
Weight[2]: 3.02067 ---> 4.48352
Training on data at index 103...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 104...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 105...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 106...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 107...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 108...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 109...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 110...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 111...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 112...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 113...
Weight[0]: -15.80000 ---> -15.80000
```

```
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 114...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 115...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 116...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 117...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 118...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 119...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 120...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 121...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 122...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 123...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 124...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 125...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 126...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 127...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 128...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 129...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 130...
Weight[0]: -15.80000 ---> -15.80000
```

```
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 131...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 132...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 133...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 134...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 135...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 136...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 137...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 138...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 139...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 140...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 141...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 142...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 143...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 144...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 145...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 146...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 147...
Weight[0]: -15.80000 ---> -15.80000
```

27/09/20, 2:58 am

```
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 12...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 13...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 14...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 15...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 16...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 17...
Weight[0]: -15.80000 ---> -15.80000
Weight[1]: -9.20501 ---> -9.20501
Weight[2]: 4.48352 ---> 4.48352
Training on data at index 18...
Weight[0]: -15.80000 ---> -16.80000
Weight[1]: -9.20501 ---> -6.33738
Weight[2]: 4.48352 ---> 6.56754
Training on data at index 19...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 20...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 21...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 22...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 23...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 24...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 25...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 26...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 27...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 28...
```

```
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 29...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 30...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 31...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 32...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 33...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 34...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 35...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 36...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 37...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 38...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 39...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 40...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 41...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 42...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 43...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 44...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 45...
```

```
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 46...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 47...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 48...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 49...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 50...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 51...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 52...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 53...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 54...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 55...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 56...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 57...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 58...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 59...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 60...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 61...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 62...
```



```
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 63...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 64...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -6.33738 ---> -6.33738
Weight[2]: 6.56754 ---> 6.56754
Training on data at index 65...
Weight[0]: -16.80000 ---> -17.80000
Weight[1]: -6.33738 ---> -7.44008
Weight[2]: 6.56754 ---> 1.35062
Training on data at index 66...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 67...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 68...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 69...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 70...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 71...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 72...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 73...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 74...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 75...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 76...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 77...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 78...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 79...
```

```
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 80...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 81...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 82...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 83...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 84...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 85...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 86...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 87...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 88...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 89...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 90...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 91...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 92...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 93...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 94...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 95...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 96...
```

```
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 97...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 98...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 99...
Weight[0]: -17.80000 ---> -17.80000
Weight[1]: -7.44008 ---> -7.44008
Weight[2]: 1.35062 ---> 1.35062
Training on data at index 100...
Weight[0]: -17.80000 ---> -16.80000
Weight[1]: -7.44008 ---> -8.40892
Weight[2]: 1.35062 ---> 3.86851
Training on data at index 101...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 102...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 103...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 104...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 105...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 106...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 107...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 108...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 109...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 110...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 111...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 112...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 113...
```

```
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 114...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 115...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 116...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 117...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 118...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 119...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 120...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 121...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 122...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 123...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 124...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 125...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 126...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 127...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 128...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 129...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 130...
```

```
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 131...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 132...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 133...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 134...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 135...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 136...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 137...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 138...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Training on data at index 139...
Weight[0]: -16.80000 ---> -16.80000
Weight[1]: -8.40892 ---> -8.40892
Weight[2]: 3.86851 ---> 3.86851
Out[8]: [-16.8, -8.408923814259989, 3.868505363789825]
```