

```

[ ]: X_vec = [1.41; 2.31; 4.13; 4.89; 5.31; 6.01]
Y_vec = [-1.4156; 2.3901; 3.0567; 0.9812; 4.1245; 2.7569]
x = 4.96

tableSize = length(X_vec)
lagrangeTable = zeros(Float64, tableSize, tableSize)

for i in 1:tableSize
    lagrangeTable[i, 1] = Y_vec[i]
end

for i in 2:tableSize
    for j in 1:(tableSize-i+1)
        head = j
        tail = j + i - 1

        det = lagrangeTable[j, i-1] * (X_vec[tail] - x) -
lagrangeTable[j+1, i-1] * (X_vec[head] - x)
        lagrangeTable[j, i] = det / (X_vec[tail] - X_vec[head])
    end
end

print(lagrangeTable[1, tableSize])

```

1.3550790271122342