

```

[ ]: 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

function LagrangeBasisPolynomial(X_vec, cur_ind, x)
    N = length(X_vec)
    basis_poly = 1.0

    for i in 1:N
        if (i != cur_ind)
            basis_poly *= (x - X_vec[i]) / (X_vec[cur_ind] - X_vec[i])
        end
    end

    return basis_poly
end

function LagrangePolynomial(X_vec, Y_vec, x)
    N = length(X_vec)
    value = 0
    for i in 1:N
        value += Y_vec[i] * LagrangeBasisPolynomial(X_vec, i, x)
    end

    return value
end

print(LagrangePolynomial(X_vec, Y_vec, x))

```

1.3550790271122342