import numpy as np

from scipy.optimize import differential\_evolution

def objective\_function(x):

return -10 \* np.cos(np.pi \* x - 2.2) + (x + 1.5) \* x

bounds = [(-10, 10)]

result = differential\_evolution(objective\_function, bounds)

min\_x = result.x

global\_min\_val = result.fun

print("global min x: ",min\_x)

print("Global Optimal Solution:")

print(f"x = {min\_x[0]}")

print(f"f(x) = {global\_min\_val}")