Prac-6

from scipy.optimize import minimize

# Objective function to minimize

def objective\_function(x):

  return x[0]\*\*2 + x[1]\*\*2

# Constraint function

def constraint(x):

  return x[0] + x[1] - 1

# Initial guess

initial\_guess = [-8,-1]

# Define the optimization problem with equality constraint

constraint\_definition = {'type': 'eq', 'fun': constraint}

# Solve the optimization problem

result = minimize(objective\_function, initial\_guess,

constraints=constraint\_definition)

# Display the result

print("Optimal solution:", result.x)

print("Optimal value:", result.fun)

