```
PROBLEM 1 ##############################
BM ELS
Approx. optimal solution x:
   -1.0000
    1.0000
Associated optimal value f(x): -1.0000
Number of iterations:      5

GM const step size
Approx. optimal solution x:
   -1.0001
    1.0001
Associated optimal value f(x): -1.0000
Number of iterations:      95

GM backtracking
Approx. optimal solution x:
   -1.0000
    1.0000
Associated optimal value f(x): -1.0000
Number of iterations:      20


PROBLEM 2 ##############################
BM ELS
Approx. optimal solution x:
    0.0525
   -0.0151
   -0.4217
   -0.1094
    0.6143
Associated optimal value f(x): 0.0018
Number of iterations:      45

GM const step size
Approx. optimal solution x:
    0.0640
   -0.0510
   -0.4283
   -0.0937
    0.6438
Associated optimal value f(x): 0.0023
Number of iterations:      758

GM backtracking
Approx. optimal solution x:
    0.0502
   -0.0024
   -0.4181
   -0.1140
    0.6040
```

Associated optimal value f(x): 0.0017
Number of iterations: 80

PROBLEM 3 ###############################

GM const step size
Approx. optimal coefficients w_0, w_1, w_2:
   1.0e+04 *
    4.6087
    0.0152
   -0.1554
Number of iterations: 4
Prediction for price of house with 2080 ft^2, 4 bedrooms:
   3.5614e+05

PROBLEM 1, SET 2 ###############################
Approx. optimal solution x:
    1.0095
    1.0192
Associated optimal value f(x): 0.0001
Number of iterations: 69458
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