```
n=100;
A=hilb(n);
b=1/3*sum(A,2);
x=zeros(n,1);
x=gradient(A,b,x,1e-4,1000)
r=b-A*x;
norm(r,inf)
```

```
x =

    0.3384
    0.3074
    0.3379
    0.3500
    0.3511
    0.3476
    0.3425
    0.3374
    0.3328
    0.3289
    0.3260
    0.3238
    0.3222
    0.3213
    0.3209
    0.3208
    0.3211
    0.3217
    0.3224
    0.3233
    0.3244
    0.3255
    0.3266
    0.3278
    0.3290
    0.3302
    0.3314
    0.3325
    0.3336
    0.3347
    0.3357
    0.3366
    0.3375
    0.3384
    0.3391
    0.3399
    0.3405
    0.3411
    0.3417
    0.3422
    0.3426
```

0.3430
0.3433
0.3435
0.3437
0.3439
0.3440
0.3441
0.3441
0.3441
0.3440
0.3439
0.3437
0.3436
0.3433
0.3431
0.3428
0.3425
0.3421
0.3418
0.3413
0.3409
0.3405
0.3400
0.3395
0.3389
0.3384
0.3378
0.3372
0.3366
0.3360
0.3354
0.3347
0.3340
0.3334
0.3327
0.3319
0.3312
0.3305
0.3297
0.3290
0.3282
0.3275
0.3267
0.3259
0.3251
0.3243
0.3235
0.3227
0.3218
0.3210
0.3202
0.3194
0.3185
0.3177

```
    0.3168
    0.3160
    0.3151
    0.3143
    0.3134


ans =

   7.1584e-05
```

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