

```
e = 10^-10;  
  
A = [-1+e 1; -1 1];  
b = [1; 1];  
  
cond_A = cond(A);  
inv_A = inv(A);  
  
b_err = [1+e; 1-e];  
  
x = A\b;  
  
x_err = A\b_err;  
  
x_diff = x - x_err;  
  
fprintf("\ncond A: %d", cond_A)  
fprintf("\ninv A %d", inv_A)  
fprintf("\nX difference: %d\n", x_diff);
```

```
cond A: 4.000001e+10  
inv A 9.999999e+09  
inv A 9.999999e+09  
inv A -9.999999e+09  
inv A -9.999999e+09  
X difference: -2.000000e+00  
  
X difference: -2
```

