

```

1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <math.h>
4 #define epsilon 1e-12
5
6 int main()
7 {
8     double a , b , c , d , x1 , x2 ;
9
10    a = 1.0;
11    b = 2.0 ;
12    c = 2.0 ;
13    d = b * b - 4 * a * c ;
14
15    if ( d > epsilon ){
16        x1 = - b / 2 / a - sqrt( d )/ 2 / a ;
17        x2 = - b / 2 / a + sqrt( d )/ 2 / a ;
18        printf ( "x1 = %5.2f, x2 = %5.2f\n" , x1 , x2 );
19    }
20    else
21        if ( d <= epsilon ){
22            printf ( "x1 = %5.2f + i * %5.2f, x2 = %5.2f + i * %5.2f\n" , - b / 2 / a , - sqrt( - d )/ 2 / a , - b / 2 /
23            a , sqrt( - d )/ 2 / a );
24        }
25        else
26            printf ( "x1 = %5.2f, x2 = %5.2f\n" , - b / 2 / a , - b / 2 / a );
27
28    return 0 ;
29 }
```