

```
1  /* 0.1を N 回加えるプログラム */
2  #include <stdio.h>
3
4  #define N 1000000
5
6  int main(void)
7  {
8      double s, e, y, tmp;
9      int i;
10
11     /* Recursive summation */
12     s = 0.0;
13     for ( i = 1; i <= N; i++ ) s += 0.1 ;
14     printf("Recursive summation の結果は\t %30.20f \n", s);
15
16     /* Compensated summation*/
17     s = 0.0; e = 0.0;
18     for ( i = 1; i <= N; i++ )
19     {
20         tmp = s;
21         y = 0.1 + e;
22         s = tmp + y;
23         e = (tmp - s) + y;
24     }
25     printf("Compensated summation の結果は\t %30.20f \n", s);
26
27     return 0;
28 }
```