

```
1 //
2 // Created by hfwei on 2022/11/10.
3 //
4
5 #include <limits.h>
6 #include <stdio.h>
7
8 int SquareInt(int num);
9 double SquareDouble(double num);
10
11 int main() {
12     // narrowing conversion (still in the range)
13     int i = 3.14159;
14
15     // out of the range: undefined behavior!!!
16     int j = UINT_MAX;
17
18     // arguments; narrowing conversion
19     double k = 3.14159;
20     SquareInt(k);
21
22     // return value; narrowing conversion
23     int m = SquareDouble(k);
24
25     int big = 1234567890;
26     float approx = big;
27     int approx_big = (int) approx;
28     printf("big = %d\t approx = %f\t approx_big = %d\t diff = %d\n",
29           big, approx, approx_big, big - (int) approx);
30
31     return 0;
32 }
33
34 int SquareInt(int num) {
35     return num * num;
36 }
37
38 double SquareDouble(double num) {
39     return num * num;
40 }
```