

```
1 #include "StdAfx.h"
2 #include "Helper.h"
3
4 #ifndef DEBUG_FILE
5 #define DEBUG_FILE "C:\\Users\\Public\\Documents\\filename.txt"
6 #endif
7
8 double deg2rad(double angle) {
9     return (angle * M_PI / 180);
10 }
11
12 double rad2deg(double angle) {
13     return (angle * 180 / M_PI);
14 }
15
16 double round(double value, int power) {
17     return ceil(value * pow(10, power)) / pow(10, power);
18 }
19
20 double cat(double hyp, double cat) {
21     return sqrt(pow(hyp, 2) - pow(cat, 2));
22 }
23
24 double hyp(double cat1, double cat2) {
25     return sqrt(pow(cat1, 2) + pow(cat2, 2));
26 }
27
28 double sind(double angle) {
29     return sin(deg2rad(angle));
30 }
31
32 double cosd(double angle) {
33     return cos(deg2rad(angle));
34 }
35
36 double tand(double angle) {
37     return tan(deg2rad(angle));
38 }
39
40 double cotd(double angle) {
41     return 1 / tan(deg2rad(angle));
42 }
43
44 double asind(double value) {
45     return rad2deg(asin(value));
46 }
47
48 double acosd(double value) {
49     return rad2deg(acos(value));
50 }
51
52 double atand(double value) {
53     return rad2deg(atan(value));
54 }
55
56 double acotd(double value) {
57     return rad2deg(atan(1 / value));
58 }
59
```

```
60 void setSafeArrayParameters(_variant_t* var_array, LPDISPATCH** objects, ↗
61     long* lCount, long* lBound, long* uBound) {
62     HRESULT hr;
63     hr = SafeArrayAccessData(psa: var_array->parray, ppvData: (void**) ↗
        objects);
64     hr = SafeArrayUnaccessData(psa: var_array->parray);
65     hr = SafeArrayGetLBound(psa: var_array->parray, nDim: 1, pLLbound: ↗
        lBound);
66     hr = SafeArrayGetUBound(psa: var_array->parray, nDim: 1, pLUBound: ↗
        uBound);
```