

```
1 #include <stdio.h>
2 #include <stdlib.h>
3
4 #include <ctype.h>
5 #include <string.h>
6 #include <stdbool.h>
7
8 #define _USE_MATH_DEFINES
9 #include <math.h>
10
11 #include "datatypes/enum.h"
12 #include "datatypes/struct.h"
13
14 #include "functions/print.h"
15 #include "functions/selection.h"
16 #include "functions/calculation.h"
17
18 int main()
19 {
20     int dimension, i;
21     enum shape shape;
22     struct History history;
23
24     // Initialize history count.
25     for (i = 0; i < 7; i++)
26     {
27         history.count[i] = 0;
28     }
29
30     DisplayTitle("assets/title.txt");
31
32     while (true)
33     {
34         DimensionSelection(&dimension);
35
36         if (!GeometrySelection(&shape, dimension))
37         {
38             continue;
39         }
40
41         CalculateProperties(shape, &history);
42
43         while (ProcessSelection())
44         {
45             CalculateHistoricalProperties(&history);
46         }
47     }
48
49     return 0;
50 }
```