

```
1 #include <iostream>
2 #include <typeinfo>
3 #include <cmath>
4
5 using namespace std;
6
7 double cal_retail(double whole_sale_price, double stock_percentage){
8     double decimals{0};
9     double retail_price{0};
10
11     if (whole_sale_price < 0 || stock_percentage < 0){
12         cout << "Sale price or markup cannot be less than $0 and %0" << endl;
13         exit(EXIT_FAILURE);
14     }else if (whole_sale_price == 0 || stock_percentage == 0){
15         cout << "Values could not be calculated. " << endl;
16         exit(EXIT_SUCCESS);
17     }
18
19     if (modf(stock_percentage, &decimals) == 0.0){
20         stock_percentage /= 100;
21     }
22
23     retail_price = whole_sale_price + (whole_sale_price * stock_percentage);
24
25     return retail_price;
26 }
27
28 int main() {
29     double whole_pri, markup_pr;
30     cout << "Enter the price of the whole sale item: ";
31     cin >> whole_pri;
32     cout << "Enter the percentage of the markup: ";
33     cin >> markup_pr;
34     double retail_price {cal_retail(whole_pri, markup_pr)};
35     printf("Price of whole sale: $%.2f \n", whole_pri);
36     printf("Percentage of markup: %%.0f \n", markup_pr);
37     printf("Price of retail: $%.2f \n", retail_price);
38
39     return 0;
40 }
```