

```
1  /*** 147 - Dollars:  
2  New Zealand currency consists of $100, $50, $20, $10, and $5 notes and $2, $1, 50c,  
3  20c, 10c and 5c coins. Given a real number indicating amount (<=$300 & will be a  
4  multiple of 5c), determine how many ways that amount may be made up.  
5  Changing the order of Listing does not increase the count.  
6  ***/  
7  #include<bits/stdc++.h>  
8  using namespace std;  
9  #define ll long long  
10 int a[]={10000, 5000, 2000, 1000, 500, 200, 100, 50, 20, 10, 5};  
11 ll dp[11][30005];  
12  
13 ll fun(int p, int n)  
14 {  
15     if(n==0) return 1;  
16     if(p>10 || n<0) return 0;  
17     if(dp[p][n]==-1) return dp[p][n];  
18  
19     ll ret=0;  
20     if(n-a[p]>=0)ret += fun(p,n-a[p]);  
21     ret += fun(p+1,n);  
22  
23     return dp[p][n] = ret;  
24 }  
25 int main()  
26 {  
27     memset(dp,-1,sizeof(dp));  
28     double amount;  
29     while(scanf("%lf",&amount))  
30     {  
31         if(amount==0.0)break;  
32  
33         char input[20];  
34         int whole,decimal;  
35         sprintf(input, "%.*lf", amount);  
36         sscanf(input, "%d.%d", &whole, &decimal);  
37         int n = (whole*100)+decimal;  
38  
39         // int n = (amount*100);  
40         // if((n%5) != 0)n++;  
41  
42         ll way = fun(0,n);  
43         printf("%6.2lf%17lld\n",amount,way);  
44     }  
45     return 0;  
46 }  
47  
48 // (int)(0.29 * 100)=28; (int)(0.57 * 100)=56; (int)(0.58 * 100)=57;  
49 // (int)(1.13 * 100)=112; (int)(1.14 * 100)=113; (int)(1.15 * 100)=114;
```