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Homework5_1

a. Write a C++ program to compute

Code :

```
#include<iostream>
using namespace std;
int main(){
	double g = 32;
	double AllD;
	double eachD;
	double temp;

	for (int i = 1; i < 11; i++)
	{
		temp = 0.5 * g * (i-1) * (i-1);
		AllD = 0.5 * g * i * i;
		eachD = AllD - temp;

		cout << i << " : Distance in the Current Time Interval = " << eachD << " ft " << endl;
		cout << i << " : Total Distance until now = " << AllD << " ft " << endl;
	}
	return 0;
}
//This code is created by Hanlin Cai
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```

b. Complete the following chart:

Time (sec)	Distance in the Current Time Interval (ft)	Total Distance (ft)
0	0.0	
1	16.0	
…		
10		

1 : Distance in the Current Time Interval = 16 ft

1 : Total Distance until now = 16 ft

2 : Distance in the Current Time Interval = 48 ft

2 : Total Distance until now = 64 ft

3 : Distance in the Current Time Interval = 80 ft

3 : Total Distance until now = 144 ft

4 : Distance in the Current Time Interval = 112 ft
4 : Total Distance until now = 256 ft
5 : Distance in the Current Time Interval = 144 ft
5 : Total Distance until now = 400 ft
6 : Distance in the Current Time Interval = 176 ft
6 : Total Distance until now = 576 ft
7 : Distance in the Current Time Interval = 208 ft
7 : Total Distance until now = 784 ft
8 : Distance in the Current Time Interval = 240 ft
8 : Total Distance until now = 1024 ft
9 : Distance in the Current Time Interval = 272 ft
9 : Total Distance until now = 1296 ft
10 : Distance in the Current Time Interval = 304 ft
10 : Total Distance until now = 1600 ft