**Worksheet-3.3**

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**Subject Name:-** Competitive Coding Lab

1. **Aim :-** Marc loves cupcakes, but he also likes to stay fit. Each cupcake has a calorie count, and Marc can walk a distance to expend those calories. If Marc has eaten **j** cupcakes so far, after eating a cupcake with **c** calories he must walk at least **2^j \* c** miles to maintain his weight.

Given the individual calorie counts for each of the cupcakes, determine the minimum number of miles Marc must walk to maintain his weight. Note that he can eat the cupcakes in any order

[**https://www.hackerrank.com/contests/101hack46/challenges/marcs**](https://www.hackerrank.com/contests/101hack46/challenges/marcs)[**-cakewalk**](https://www.hackerrank.com/contests/101hack46/challenges/marcs-cakewalk)

1. **Code:-**

#include <bits/stdc++.h>

using namespace std; int main()

{

int n;

cin >> n;

vector<int> calories(n);

for(int calories\_i = 0;

calories\_i < n; calories\_i++)

{

cin >> calories[calories\_i];

}

// your code goes here

sort(calories.begin(),calories.end());

reverse(calories.begin(),calories.end());

long long temp=1,ans=0;

for(int i=0;i<n;i++)

{

ans+=calories[i]\*temp;

temp\*=2;

}

printf("%lld\n",ans);

return 0;

}

1. **Output:-**

