

My Project

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Chapter 1

Assignment-3

Starter Code for Assignment 3

Chapter 2

File Index

2.1 File List

Here is a list of all documented files with brief descriptions:

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| hw_broken.cc | 5 |
|--|---|

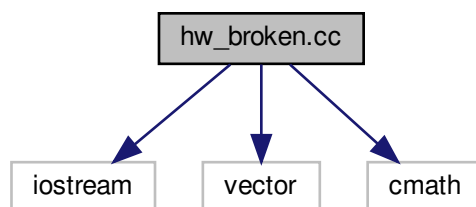
Chapter 3

File Documentation

3.1 hw_broken.cc File Reference

```
#include <iostream>
#include <vector>
#include <cmath>
```

Include dependency graph for hw_broken.cc:



Functions

- double [deviation](#) (int *a, int n)

A function to calculate the standard deviation of a given array.

3.1.1 Function Documentation

3.1.1.1 deviation()

```
double deviation (
    int * a,
    int n )
```

A function to calculate the standard deviation of a given array.

The standard deviation is calculated according to the following formula

$$\sigma = \sqrt{\frac{1}{N} \sum_{i=1}^N (x_i - \epsilon)^2}$$

Where the mean ϵ is calculated with the formula

$$\epsilon = \frac{\sum_{i=1}^N x_i}{N}$$

This standard deviation is of an entire population.

Parameters

| | |
|-----|--|
| a | - the input array of integers for deviation to be calculated |
| n | - the length of array $a[]$ |

Returns

Returns the standard deviation of the input array (as a double)fixed 2-11-19