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:

Chapter 3

File Documentation

3.1 hw_broken.cc File Reference

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

Functions

- double deviation (int *a, int n)
  calculates standard deviation

3.1.1 Function Documentation

3.1.1.1 deviation()

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

calculates standard deviation

a	a dynamic array of integers used to store the data set
n	the size of the dynamic array used to store the data set

Returns

the standard deviation of the integers in the dynamic array expressed as a double

The standard deviation σ_x of a data set is

$$\sigma_x = \sqrt{\frac{\sum_{n=1}^{k}(x_n - \bar{x})^2}{n}},$$

where $\bar{x}$ is the mean of the data set x_i, n is the number of elements in the data set, and $\sum$ denotes the sum of all the differences of each element from the mean squared.