

Devin Hardy

Dhardy2@my.athens.edu

00076619

ASG1

```
// ASG 1
```

```
#include <iostream>
```

```
#include <fstream>
```

```
#include <vector>
```

```
#include <numeric>
```

```
using namespace std;
```

```
double findAVG(vector<double> const& nbr)
```

```
{
```

```
    if (nbr.empty()) {
```

```
        return 0;
```

```
    }
```

```
    return (accumulate(nbr.begin(), nbr.end(), 0.0)/ nbr.size());
```

```
}
```

```
// https://www.techiedelight.com/find-average-of-all-values-present-in-a-vector-in-cpp/
```

```
int main()
```

```
{
```

```
    double readIn;
```

```
    double AVG;
```

```
    ifstream iFile;
```

```
ofstream oFile;

oFile.open("AvgFile.txt");
iFile.open("ReadFile.txt");

vector<double> nmbrs;
while(iFile >> readIn)
{
    nmbrs.push_back(readIn);
    cout << readIn << endl;
}
AVG = findAVG(nmbrs);
oFile << "Average number is " << AVG << "." << endl;
iFile.close();
oFile.close();

return 0;
}
```

References

[1]"Find average of all values present in a vector in C++ | Techie Delight", *Techie Delight*, 2022. [Online]. Available: <https://www.techiedelight.com/find-average-of-all-values-present-in-a-vector-in-cpp/>. [Accessed: 22- Aug- 2022].