

```
1 Array of ints: [3] [90] [32] [8] [0]
2 Array of floats: [2.6] [4.3] [53.6] [83.7] [0.3]
3 Average for ints: 26.6
```

```

1 #include <iostream>
2 #include <fstream>
3 #include <string>
4
5 void readData(std::string fileName, size_t arraySize, int arrayofInts[], float
arrayofFloats []);
6 double averageForIntegerDataset(size_t arraySize, int arrayofInts[]);
7
8 int main()
9 {
10     std::string fileName {"data.txt"};
11     std::string temp {};
12     size_t arraySize {};
13     std::fstream fin(fileName, std::ios::in);
14     while(std::getline(fin, temp))
15         ++arraySize;
16     arraySize /= 2;
17     fin.close();
18
19     int arrayofInts[arraySize];
20     float arrayofFloats[arraySize];
21     readData(fileName, arraySize, arrayofInts, arrayofFloats);
22
23     std::cout << "Array of ints: ";
24     for(size_t i {0}; i < arraySize; i++)
25         std::cout << "[" << arrayofInts[i] << " ] ";
26
27     std::cout << "\nArray of floats: ";
28     for(auto i : arrayofFloats)
29         std::cout << "[" << i << " ] ";
30
31     std::cout << "\nAverage for ints: " << averageForIntegerDataset(arraySize,
arrayofInts) << "\n";
32     return 0;
33 }
34
35 void readData(std::string fileName, size_t arraySize, int arrayofInts[], float
arrayofFloats [])
36 {
37     std::fstream fin(fileName, std::ios::in);
38     for(size_t i {0}; i < arraySize; i++)
39     {
40         fin >> arrayofInts[i] >> arrayofFloats[i];
41     }
42 }
43 double averageForIntegerDataset(size_t arraySize, int arrayofInts[])
44 {
45     double sum {};
46     for(size_t i {0}; i < arraySize; i++)
47         sum += arrayofInts[i];
48
49     return sum/arraySize;
50 }

```