

John Marshall Week 2 Lab: Processing 1000 Random Integers
CS112

```
Main{
    Initialize Int[] = randomNums [1000]

    For (Length of randomArray){
        Array[i] = int(Math.Random*10) +1
    }

    Print randomNums

    BubbleSort randomNums

    Total = calculated Sum
    Aver = calculated Average

    Print sorted randomNums

    Calculate Sum

    IO file x = John Marshall Week 2 Lab

    Y = printWriter
    Y print John Marshall Week 2 Lab: Processing 1000 Random Integers
    Blank Line
    Y Print Total
    Blank Line
    Y print Average
    Close Stream
}

BubbleSort( array ){
    Is sorted? = false
    Y = number of times run to subtract from loop passes (end number is known to be the
    highest No need to Compare)
    Int i;

    while(isSorted == false){
        isSorted = true
```

```
For (i, length of Array- y, i++)  
    (if array[i -1] > array[i]){  
        Swap array[i -1] & array[i]  
    }  
  
}
```

```
Calculate sum(array){  
    Int sum;  
    For (i, length of Array- y, i++)  
        Sum = sum + array[i]  
  
}
```