ARRAY1.CPP source

```
01: /*
02:  * Q: Read N numbers into an array
03:  * and print those which are larger than
04:  * the average
05:  */
06:
07: #include <iostream>
08:
09: using namespace std;
10:
11: int main() {
12:
13:   //Defining variables
14:   int array[100]; //to store umbers entered by user
15:   int N;          //how many items will be entered
16:   int avg;        //to store average of numbers in array
17:
18:   cout<<"How many numbers would you like: ";
19:   cin>>N;
20:   cout<<"Enter the numbers:"<<endl;
21:
22:   //Reading into array[0], array[1],
23:   //array[2]....., array[N-1]
24:   for(int i=0; i<N; i++) {
25:     cin>>array[i];
26:   }
27:
28:   avg=0;
29:
30:   //Average = Sum of all numbers / Total number of items
31:
32:   //Step 1: Sum of all numbers
33:   //avg = array[0] + .... + array[N-1]
34:   for(int i=0; i<N; i++) {
35:     avg+=array[i];
36:   }
37:
38:   //Step 2: Divide by total number of items
39:   avg/=N;
40:
41:   cout<<endl<<"The average is: "<<avg<<endl;
42:   cout<<endl;
43:   cout<<"The numbers greater than average are:"<<endl;
44:
45:   //if array[0]>avg, print array[0] ... array[N-1]>avg, print array[N-1]
46:   for(int i=0; i<N; i++) {
47:     if(array[i]>avg) cout<<array[i]<<endl;
48:   }
49:   cout<<endl;
50:
51:   //Tell the operating system that everything is OK (exit code 0)
52:   //More info in higher classes
53:   return 0;
54: }
55:
```

ARRAY1.CPP output

```
01: How many numbers would you like: 10
02: Enter the numbers:
03: 1
04: 2
05: 3
06: 4
07: 5
08: 6
09: 7
10: 8
11: 9
12: 10
13:
14: The average is: 5
15:
16: The numbers greater than average are:
17: 6
18: 7
19: 8
20: 9
21: 10
22:
23:
```