5. Why is ALGOL not used today? Write a program in C/C++ or another language, to perform the same as the ALGOL program shown in pages 57-58. Test the code and include a screenshot of your output in your answer.

ALGOL 60 became the only acceptable formal means of communicating algorithms into computing literature and it remained that way for more than 20 years. Every imperative programming language designed sine 160 owes something to ALGOL 60, some of these descendants are: C, C ++, Java, and C#. This was the first time an international group attempted to design a programming language. This was the first language designed to be machine independent. This was also the first formally described syntax. But even with all of this it never was popular, even in Europe. It was not used and is not used today of course because of a few things. One of these things is that some features were too flexible which made understanding the code difficult and inefficient. The lack of input and output statements was also an issue. This made programs difficult to port to other computers. BNF (Backus–Naur Form) is a context-free grammar commonly used by developers of programming languages to specify the syntax rules of a language. This was another pitfall of ALGOL, but it was also one of its strengths. At the time, (1960) this was considered weird and complicated, but today BNF is very common and useful. The last reason ALGOL died before it lived, is because IBM made sure Fortran was at the forefront of coding languages. So not only is ALGOL not used today, it really never was used that much, but we learned a lot from it and computer science as a whole benefitted.

Here is my code:

import java.util.Scanner;

import java.util.\*;

// ok so this code in ALGOL, I hate it

//I'm going to do the same thing as the program wants to accomplish,

//but not in the same exact way? maybe? ALGOL is hard to read

public class algol{

public static void main(String args[]) {

ArrayList<Integer> intlist = new ArrayList<Integer>();

int listlen, average, result = 0;

int counter = 0;

int sum = 0;

//read input into array and computer average

Scanner sc = new Scanner(System.in);

String end = "y";

while (end.equalsIgnoreCase("y")){

System.out.println("Please enter integers between 1 and 99 to add to the array");

listlen = sc.nextInt();

if (listlen < 100 && listlen > 0){

counter ++;

sum ++;

intlist.add(listlen);

System.out.println("Add another integer? (Y)es (N)o");

end = sc.next();

}

else{

break;

}

}

//computer the average

average = sum/counter;

for(int i = 0; i < intlist.size(); i++){

if (intlist.get(i) > average){

result = result + 1;

}

}

System.out.println("The number of values above the average is " + result);

}

}

