Program for Term Paper

For the term paper program I want to accomplish the same goal in both C++ and Java. The most important things for me are the ability to take in user input, lists, arrays, loops, and the ability to compute simple mathematical equations. I have done lots of Java and Python in highschool and college, but a program that was really fun for me to write was something called PCConfig. It has an overarching while loop, lots of user input, a ridiculous amount of if statements and basic math. I feel as though this program hits a lot of boxes that I discussed were important to me. It is also simple enough (I hope) for me to write in a language that I have never written in before. The goal of this program is to give the user an option to build whatever number of computers, choose what will be in the computers, be able to upgrade those choices, and then list the prices of all of the computers. I think this program would be a really good way to show the basics of the languages. Here is part of my Java code:

public class KnutsonPCConfig {

//this gets called everytime we want the user to see this menu (makes code much shorter)

public static void menu(int i){

System.out.println("");

System.out.println("Currently Editing: PC " + (i+1));//because i starts at 0 and we arent on PC 0 now are we

System.out.println("----------------------------");

System.out.println("");

System.out.println("Please choose from this menu");

System.out.println("");

System.out.println("1. Processor ");

System.out.println("2. Graphics Card ");

System.out.println("3. Memory ");

System.out.println("4. Monitor ");

System.out.println("5. Exit ");

System.out.println("");

}

public static void main (String[] args){

// the welcomeeeeeeee bannerrrrrrrrrrrr

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

System.out.println("\* Welcome To The \*");

System.out.println("\* Computer Configurator \*");

System.out.println("\* V-1.0 \*");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

// we just have most of the variables we need right here, in case of problems

int ccounter;

int i = 0;

int price = 0;

int totalprice = 0;

int choice = 0;

int pchoice;

// here is the scanner, hes looking dapper

//here we see how many computers the user wants so we can do this whole big while loop for all the good stuff

Scanner sc = new Scanner(System.in);

System.out.print("How many computers would you like to purchase? ");

ccounter = sc.nextInt();

//here we call the menu for the first time for PC1 to set our choice variable because we need that to have a value for the while loop

menu(i);

System.out.println("Which item would you like to upgrade? ");

choice = sc.nextInt();

//big loop that does everything we need as long as the place we are in the loop is less than the amount of PCs the user wants

// we can do this because i starts at 0

while (i < ccounter){

//we start these strings everytime in the loop because if the user doesnt edit them, it needs to show that

String Processor = "Stock";

String GraphicsCard = "Stock";

String Memory = "Stock";

String Monitor="Stock";