Dear Jeff Bezos

I was happy to hear from you my old friend it has been too long. I thought it was odd that you needed help understanding Programming Principles, but I think you have come to the right place. I have almost passed programming fundamentals at Utas. So, I am kind of a pro at this…

Here is everything you need to know.

Programs come in many shapes and sizes. Code is read by the computer in a sequence. A sequence is basically a list of simple steps that the computer will use to solve a problem. These steps describe an algorithm. Think of it as giving a list of instructions on how to tie your shoes to someone who had never done it before. This part of the code is often written in the program main() which is what the computer will read though until the problem is solved.

Selection is another way the computers will use code to solve a problem. Like a sequence although depending on the answer to the code the computer will jump to do different actions. These are seen in the form of ‘if-else’ statements. Imagine if I asked you go buy me some food, and I asked you to get me a burger ‘if’ the line is short, else just get me some chips. Another form is a ‘switch’ statement. In your case imagine you ask someone what delivery option they would like on the awesome new amazon purchase. They can get same day, express or default. Depending on thier response you would give them that option.

Repetition is the third principle which the computer will follow. This is seen in code which has things like ‘do’, ‘do-while’ and ‘for’ loops written in them. These key words help the computer understand it will need to continually loop through an action until a certain goal is met. A good way of thinking about it is when you are reading a book you will finish reading a page and continue to go to the next page until you have finished the book or gotten sick of reading. Then you can start a new book or put the book away for latter.

Now…. What can we do with these three things? Well we have things called variables and constants. These are very basic. Variables start as a value. These can be changed as the programs goes on. This is like having a jar of 100 jellybeans. As you eat them or add more the value (starting at ‘100’) will change leaving you with more, or less jellybeans. Constants are a value that cannot be changed. Like having 5 seats in your car. If you have 6 people you will not have enough seats. Unless you are Jeff Bezos and you have a limo, so you have more seats…. Or a jet…. Or a helicopter…… or a Yacht.

Now what is good practice for all this code for big programs? Modularisation! It is a big word, but it is basically a way of writing a program in separate sections to make it easier for people to read. Separating different functions of the code will keep the code easy to follow and will allow you to reuse different parts. These parts and placed into methods. Which is just a thing that can be used repeatedly. Like using your phone to read a text every time you get a new message (instead of going to buy a new phone from amazon and waiting for shipping). If you have a collection of related methods, you should consider putting them into a new a new class. This class could be used by other programs! Which will save you time. I am all about saving time!

Hopefully, this answers all your question about programming. If you have any more need for help with amazon feel free to ask! I will be finish studying soon and looking for a job.

Best Wishes Ted, 532970