Intro to Java Week 2 Research Assignment

**Points possible:** 30

|  |  |  |
| --- | --- | --- |
| Category | Criteria | % of Grade |
| Accuracy | Is the information accurate? | 25 |
| Organization | Is the essay clean and organized? Ideas are presented in a logical order. | 25 |
| Citations | Students reference and cite at least 5 sources. | 25 |
| Completeness | All requirements of the assignment are complete. | 25 |

**Instructions:** In however many words necessary, write a thorough essay response to each of the below prompts. Be sure to include at least 5 references for this assignment. Do not copy and paste text from the internet or any other source; use the information you find in your research, summarize, in your own words, the concepts. Plagiarism will result in a zero for the assignment as well as disciplinary actions. Push this document to your GitHub repository for this week. Add the URL for this week’s repository to this document where instructed and submit this document to your instructor when complete.

**What are the different loops Java provides us with?**

**There are 3 loops in java, For Loops, While Loops, and Do While Loops. For loops are known as the most common of the 3. The structure of a For loop is based around a fixed set of repitions of code. While loops are for when you want to keep looping through your code to meet certain condition or to find a condition that would be true. The do While is the less common of the 3 and the difference is taht the Do While loop execute the code in your block at least once, Which differs from the While Loop which will skip a whole section of code if it is false the first go around.**

**What is the syntax of one of the loops in your above answer? How and when should you use this loop? Give an example.**

**With a For Loop a syntax would be that it stops if it evaluates to false. The for loop is a structure that executes a section of code a specified number of times, Such as sending an email to a list of email adresses, you can use a loop to send a message to each address.**

**What is the syntax of another one of the loops in your above answer? How and when should you use this loop? Give an example**

**A syntax of the While loop is that when a condition becomes false instead of stopping, it passes over it and continues following the loop. If you want to travel by plane you have to buy a ticket first and then you are elegible to fly because the first condition was met.**

**What is the syntax of another one of the loops in your above answer? How and when should you use this loop? Give an example.**

**Syntax for a do while is that it will run the code atleast once, even if its false. which does not seem product, which also is probably why its less popular. Imagine getting on a bus, its not like the plane where a condition is met first, On a bus you get on the bus and then you buy your ticket, So the code proceeded and then checked.**

**What is your favorite thing you learned this week?**

**I learned a bunch about booleans which I think is really cool.**

**References:**

[**https://www.quora.com/What-is-a-good-reason-to-use-a-do-while-loop**](https://www.quora.com/What-is-a-good-reason-to-use-a-do-while-loop)

[**https://www.quora.com/Why-do-we-use-a-for-loop**](https://www.quora.com/Why-do-we-use-a-for-loop)

[**https://docs.oracle.com/javase/tutorial/java/nutsandbolts/for.html**](https://docs.oracle.com/javase/tutorial/java/nutsandbolts/for.html)

[**https://syntaxdb.com/ref/java/for-loop**](https://syntaxdb.com/ref/java/for-loop)

[**https://www.open.edu/openlearn/science-maths-technology/computing-and-ict/the-syntax-the-loop**](https://www.open.edu/openlearn/science-maths-technology/computing-and-ict/the-syntax-the-loop)

**URL to GitHub Repository:**