

GIRLS DIVERSIFYING TECHNOLOGY+

THE BEGINNER CODING WORKSHOP



Checklist

WORKSHOP PREPERATION



Ensure you have a
working zoom account



Wifi is connected



Headset ready



Notetaking device



Workshop Goals

YOU CAN DO IT

Basic understanding of
programming fundamentals



Applying coding fundamentals

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Understanding what
programming is



Understanding why
programming is useful



Building confidence to explore
coding on your own



Complete at least one
programming exercise



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Java is Our Workshop Language

JAVA IS AN OBJECT ORIENTED
PROGRAMMING LANGUAGE, WE WILL
NOT BE FOCUSING ON THOSE ASPECTS
OF JAVA. RATHER, WE WILL BE
FOCUSING ON THE TRANSFERRABLE
PROGRAMMING FUNDAMENTALS.

WHAT IS A COMPUTER?



INPUT & OUTPUT DEVICE

A computer is an electronic device that manipulates information, or data. It has the ability to store, retrieve, and process data.

CODE & COMPUTERS

Code is essentially a set of instructions, you give to a computer to perform. The code is what you input into the computer, the computer then processes the information and provides us with our instructed output.



Try to conceptualize everything with the real life examples given in the workshop.

BIG IDEAS WE WILL FOCUS ON



VARIABLES



OPERATORS



CONDITIONALS &
LOOPS



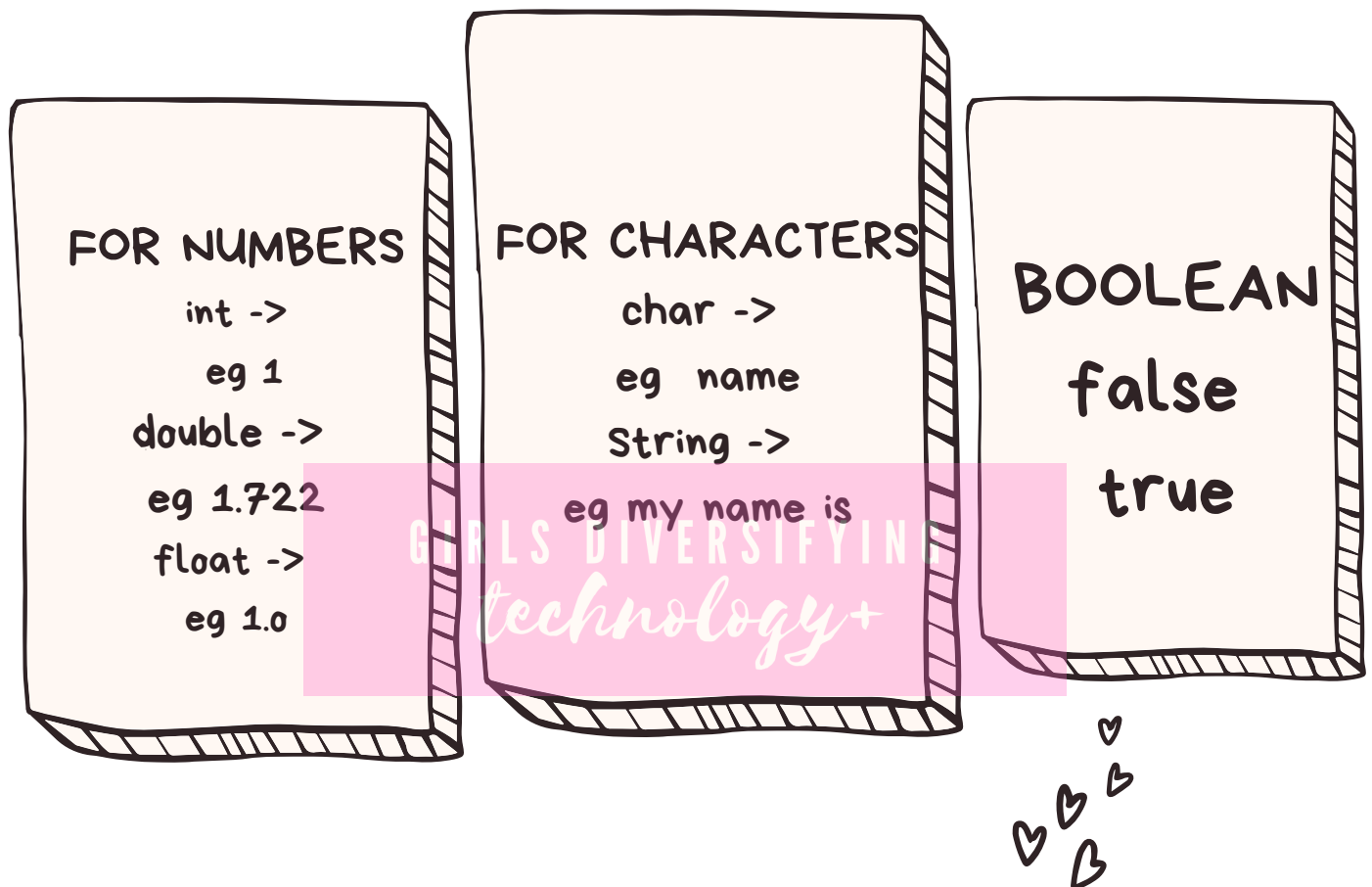
METHODS

WHAT IS A VARIABLE?



Variables are essentially containers within classes, they store values to be referenced and manipulated in a computer program. They also provide a way of labeling data with a descriptive name, so our programs can be understood more clearly by the reader and ourselves.

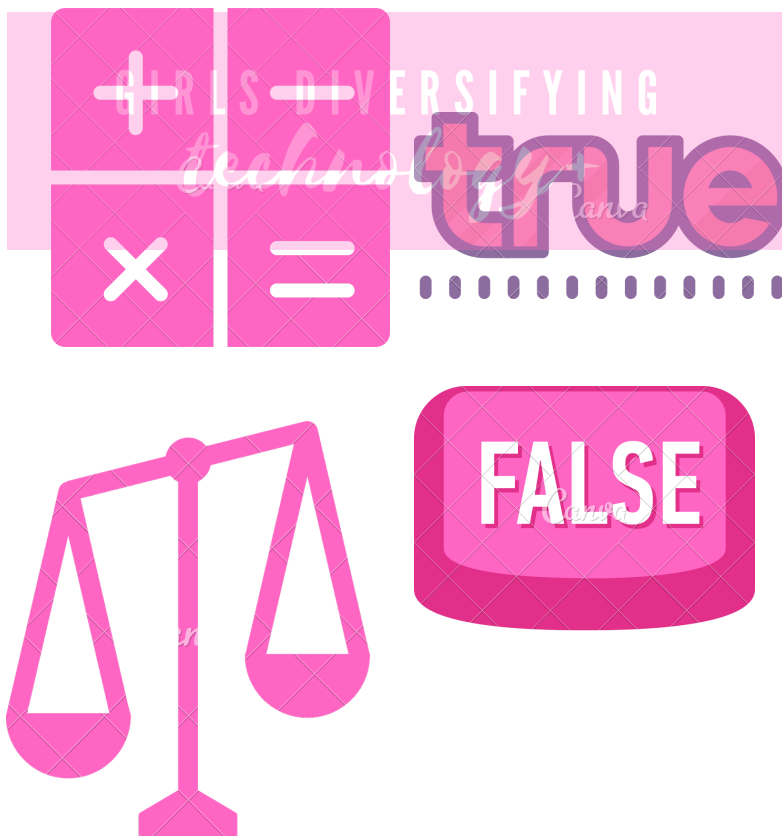
WHAT IS A DATATYPE?



A data type, in programming, is a classification that specifies which type of value a variable has and what type of mathematical, relational or logical operations can be applied to it without causing an error. A string, for example, is a data type that is used to classify text and an integer is a datatype used to classify whole numbers.

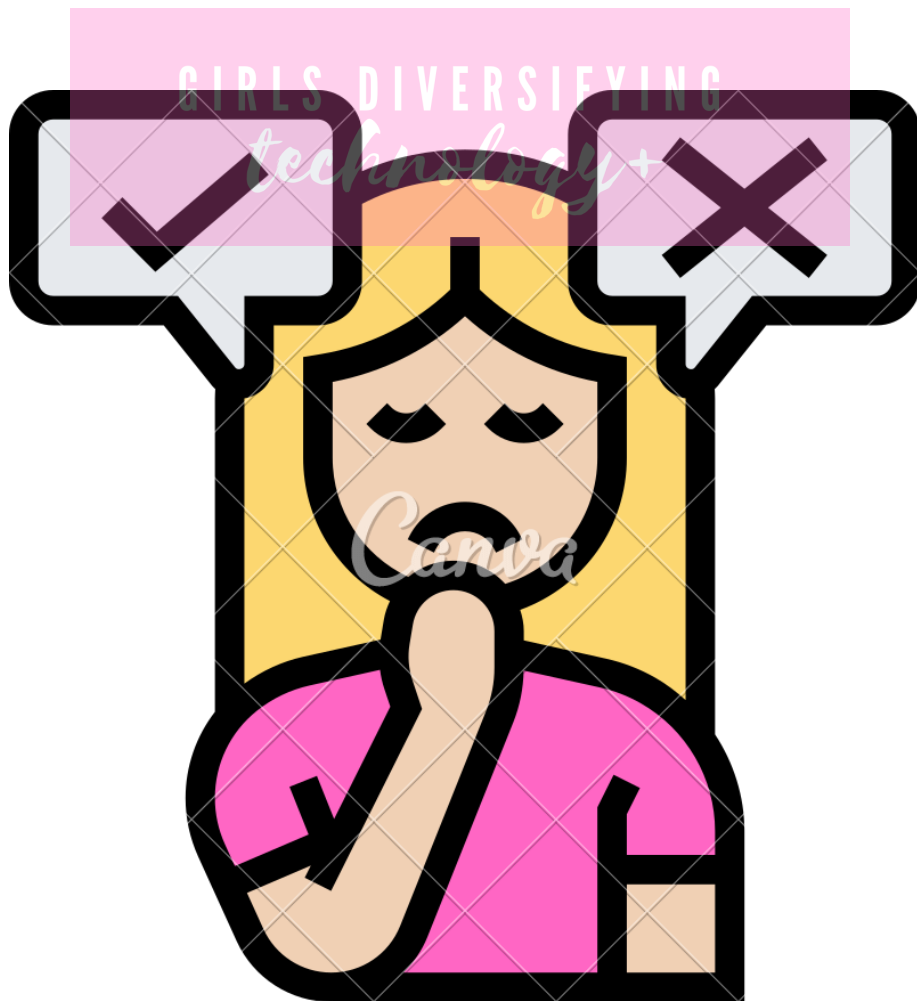
WHAT ARE OPERATORS

An operator is a character that represents an action.



WHAT ARE CONDITIONALS

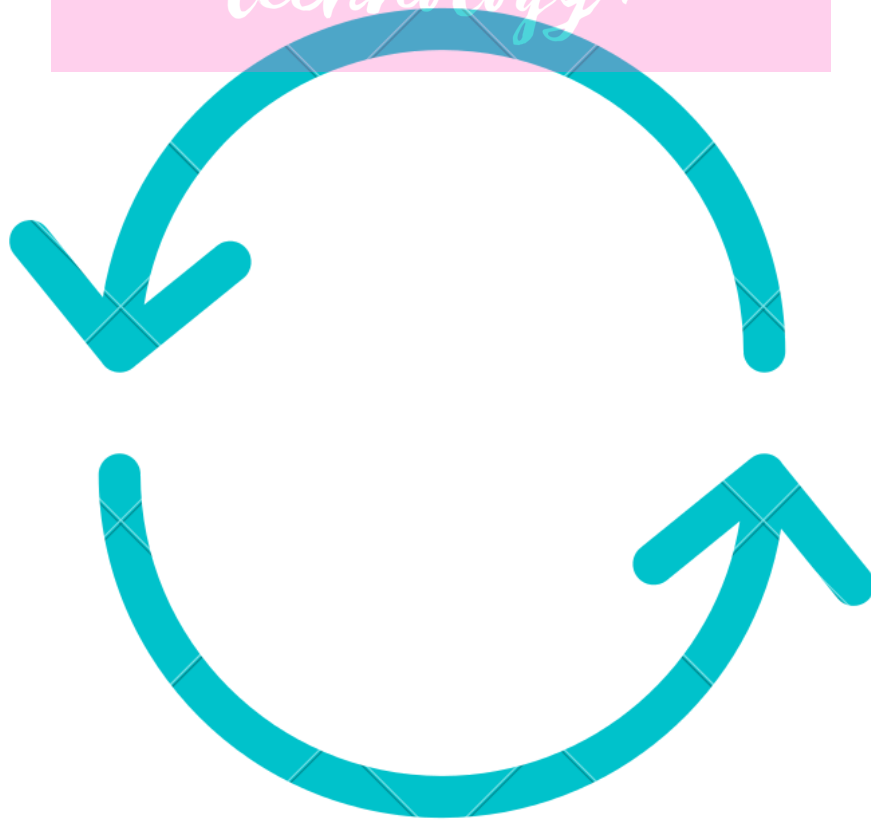
A conditional statement tells a program to execute different actions depending on whether a condition is true or false.



WHAT ARE LOOPS?

A loop is a sequence of instructions that are continually repeated until a certain condition is reached. Imagine you are in the grocery store looking for bananas, you keep circling through the produce isle till you find the bananas.

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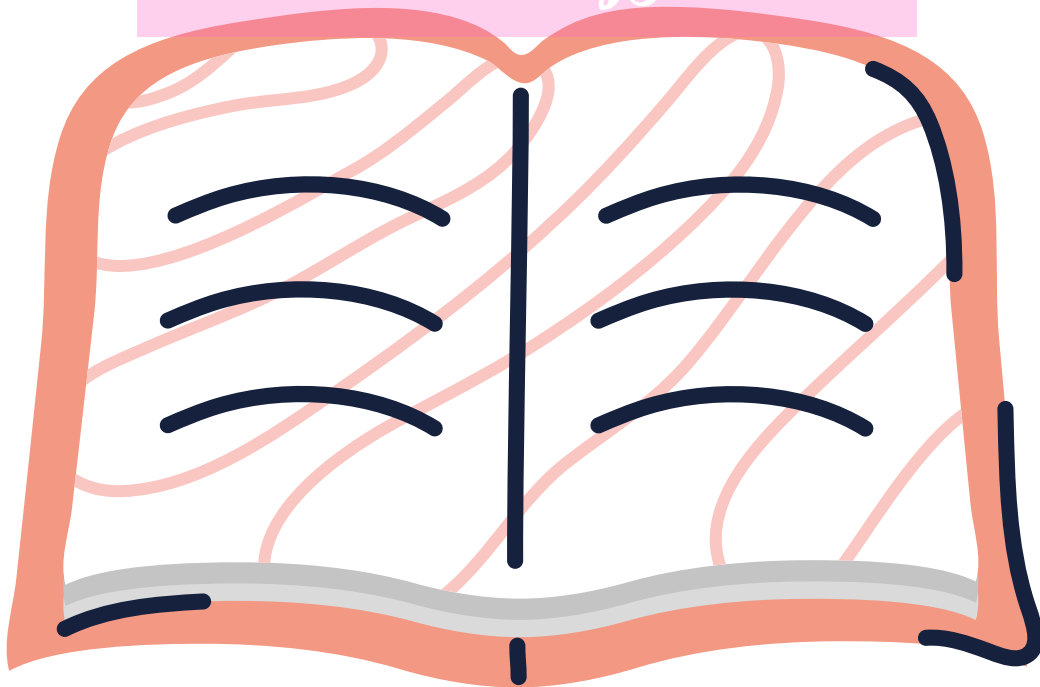


WHAT ARE METHODS?

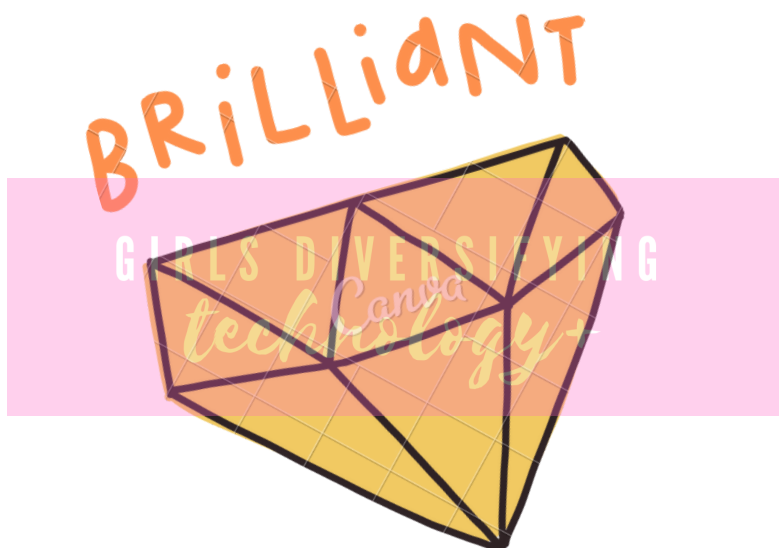
A method is a procedure. In cooking you've got a recipe, and that recipe has different instructions. Usually it has steps from one to five. The instructions tell you what to do at that particular

point as does a method.

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TIME FOR YOU GUYS TO TRY SOME CODING



Go to this link!

[https://www.tutorialspoint
.com/compile_java_online.
php](https://www.tutorialspoint.com/compile_java_online.php)



TASK 1

1. Print "Hello World!" using a print statement in your main method
2. Add a comment to show what big idea you are using for step 3
3. Create 2 variables in your class
4. Make variables equal to two numbers of your choice
5. Use your variables to complete an operation and store value in variables
6. Print result of operation





TASK 2

1. Identify which of the five big ideas we need to repeat a set of code
2. Create a for loop, which allows you to set a conditional
3. Add the first two variables together
4. Create two new variables under the for loop
5. Create a variable to store the value of the sum of the two new variable
6. Print the new result



WHAT HAVE WE COVERED?





- Variables & Datatypes
- Operators
- Conditionals
- Loops
- Methods



THANK YOU FOR ATTENDING

THE BEGINNER CODING WORKSHOP



PART 2 TO THIS
BEGINNER WORKSHOP
WILL BE RELEASED
SOON, KEEP AN EYE
OUT TO FURTHER
EXPAND UPON YOUR
CODING IN A PROJECT
BASED WORKSHOP.

FOLLOW US ON INSTAGRAM TO STAY UP TO DATE



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