

## Introduction to Programming and Computer Science Notes

- Programming: Instructing a computer to complete specific tasks without making mistakes
- Every IDE has its syntax (programming grammar)
- Modulus returns the remainder
- Variable stores a piece of information
- Integer, float, and double variables can be added, subtracted, multiplied, divided, and modulused. String can be added.
- Variables must be one continuous string
- An array is a list of something. Every element has its place in the array, called INDEX. Array sizes are final. You cannot mix types in arrays.
- Loops run an instruction repeatedly
- Errors: syntax, runtime, and runtime errors
- You can import functions, you do not have to write by yourself all the time.
- ArrayLists or Lists A growing array
- Data structures: linear search, binary search
- Recursive functions: functions that repeatedly call themselves
- Pseudocode: planning your program before writing it (flow charts, writeup, functionality planning

## Jot down some text