School Nova Computer Science – first semester – review of topics

The core material, covered in the first semester, that you should know

#	Topic	Student Notes
1	Using Python editor, saving your code in a file, running your code	
2	Arithmetic operators	
3	Comparison operators	
4	Logical operators: *and, or, not*	
5	String, integer, float, Boolean: definitions and basic operations	
6	Str(), int(), float(), bool(), type(), id()	
7	Print() and f-strings	
8	Input()	
9	Try-except-else structure, purpose, application	
10	Iteration: while, continue, break	
11	Iteration: for loop, range(), len()	
12	Conditional: if else, if elif else	
13	Lists: format, indexing, slicing, nested list	
14	List operations: append, extend, remove, insert, pop, del, in, not in	
15	List copy() and deepcopy(). Difference between '=' and copy()	
16	Differences between lists, tuples, sets, and dictionaries	
17	Type conversion: list(), tuple(), set(), dict(). Empty data structures.	
18	Set methods: union(), update(), intersection(), difference(), and so on*	
19	Dictionary: using/updating keys, accessing/adding elements	
20	Dictionary methods: get(), items(), keys(), pop(), update(), values() *	

* you don't need to memorize all the methods but you should know of their existence and be able to use with a reference such as https://docs.python.org/3.8/library/stdtypes.html#set