Python #4

We have met a **boolean** type. It can have values of **True** and **False** and can be used for signaling about different bi-state conditions like if some variable has value bigger than other value. We have seen some functions and methods returning a boolean value like **.isalpha()**. Also we have seen **comparison operators** like **>=** used in boolean expressions to perform tests.

The program flow in Python can be controlled by **if..else** block. The idea is to take some actions in case some condition is met and some other actions if the condition is not met. A block in Python is identified by **indentation**. As a part of actions more tests can be conducted. Tests can be combined in more complex tests using **boolean operators**. We can have more than just 2 cases using **if..elif..else** block.

In PyCharm, it is possible to run a program in a special **Debug** mode. The program runs normally until it meets a **breakpoint** which we put at points of interest.We can halt the program at any point in the program, watch variables’ state, alter values, run the program line by line or run until the next breakpoint. It spares printing values in the program and helps to see which route the program runs on.

More topics covered:

* **in** operator
* **bool()** - casting

Links:

* [Booleans](https://www.w3schools.com/python/python_booleans.asp)
* [Conditions](https://www.w3schools.com/python/python_conditions.asp)
* [Operators](https://www.w3schools.com/python/python_operators.asp)
* [Debugging](https://www.jetbrains.com/help/pycharm/part-1-debugging-python-code.html#evaluate-expressions)