8 - Variables in C++

terça-feira, 28 de janeiro de 2025 07:05

- We want to use and manipulate data and store data into variables
- To store memory and keep using it
- wil be in memory stack or n the heap
- Do occupy memory
- rmitive data types
    - Although it has a proorse, you don't need to use it for that
    - the syze defines th big difference between the variables
    - INT
        - <TYPE> < VALUE> = <VALUE?>
        - 4 BYTES LARGE
        - store integers into a range // -2b -> 2b
        - Ohterwise it can't support
        - 1 bit to see if the number is positive or negative
    - Unsigned INT
        - Same but only positive, and the range grows 0 -> 4b
    - CHAR
        - stores characters and not numbers
        - each character has a number, which is stored here
        - can use unsigned here to expand the size of the varibale type
- The main difference s the amoubt of memory that would be allocated
    - FLOAT
        - 4 BYTES of data
        - If we hava na F in the end... we defined a float
    - DOUBLE
        - 8 BYTES data tye
    - BOOL
        - Relies to true or false (1 or 0)
        - we can only access bytes, so bools has 1 byte
- How to know the size of a variable
    - sizeof(bool)
- We have te abality to transform them into pointers or references (other video)