

Homework – Task 1

- The relational operators (<, >, <=, >=, ==, !=) compare two numbers. The result can only be True or False.
 - For instance, $5 < 2$ is False, while $4 \neq 3$ is True
- In the first task, tell whether the following Boolean expression is True or False.
 - Check your answer using Python.

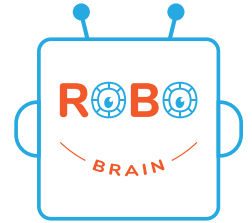
- $5 \leq 6$
- $9 \Rightarrow 8$
- $3 = 3$
- $6 \neq 6$
- $'7.5' < 8.5$

- $a = 6$
 $b = 2$
 $a = a - b * b$

- $a < 2$
- $c = -3$
 $b = b // 3 + 2 * c$
 $b + 7 > 2$
- $\max(b, c) == -1$



Task 2

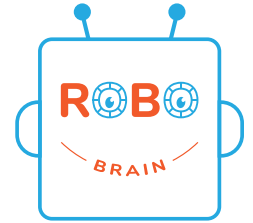


- We can not only compare numbers, but also characters and strings.
- Order of characters
 - `"" < " " < "0" < "1" < "9" < "A" < "B" < "Z" < "a" < "b" < "z"`
- You may use `ord()` function to check the value of the character
 - because `ord("A")` is smaller than `ord("a")`, `"A" < "a"`
- Order of strings
 - As if in a dictionary
- In Task 2, you are going to compare some characters and strings and tell whether each Boolean expression is True or False and check in Python.

- `'a' < 'A'`
- `'8' <= 'p'`
- `'icecream' < 'ice cream'`
- `'56' * 4 > '56' * 5`
- `"py" + "thon" >= " python"`
- `"pro" != "pr0"`
- `"Time" > "Tim"`
- `"4321" < "abcd"`
- `"one" == "one"`
- `"one" > "1"`



Task 3



- There are three Boolean operators that can build more complicated Boolean expressions.
 - AND: Both operands have to be True in order for it to be True.
 - OR: At least one operand has to be True in order for it to be True.
 - NOT: True becomes False and False becomes True.
- In this task, you decided to try the Ghost Train in the Funfair by the beach. There is a sign saying that



You can get on the ride if you are over 16 years old or you are taller than 120cm and accompanied by a paying adult.

- Create the following variables: `age`, `height`, `by_parent` and `can_ride`.
 - Ask the user the `age` by `input()` function.
 - Ask the user the `height` by `input()` function.
 - Ask the user whether s/he has been with a parent by `input()` function.
 - Define how `can_ride` is related with `age`, `height` and `by_parent`.
 - Print out `True` (meaning can get on the ride) or `False` (not allowed).

