

PB notes 04 theory

I. Invoer meteen converteren

To instantly convert the input of `Console.ReadLine()` or `Console.Read()` => put in into a `.Parse()` method. ex.:

```
1 Console.WriteLine("Geef het aantal deelnemers : ");
2 int aantalDeelnemers = int.Parse(Console.ReadLine());
3
4 int helft = aantalDeelnemers / 2;
5 Console.WriteLine($"De helft van dat aantal is: {helft}")
```

2. Debugging

compile errors: => compiler does not understand/ wants to hinder you from executing

Runtime errors (Exceptions): => errors that happen while executing = exceptional errors

Logic errors: => no compiler or runtime error but does not do what's expected ex. wrong calculations

2.1 Debugging in VS

in Locals window you can find the variables on the stack to help debug (*Debug > Windows > Locals*)

extra information about the stack: <https://www.geeksforgeeks.org/c-sharp-stack-with-examples/>

Breakpoint: code halts when trying to execute a line of code where the breakpoint is located.

=> in locals we can now see the variables and their values => you can execute the code **step-by-step** and track the changes to values of vars

3. If ... else if ... else ...

```
1 //correct if ... else if ... else block
2 if (condition1) {
3     <code_block_1>
4 }
5 else if (condition2){
```

```

6         <code_block_2>
7     }
8     else if (condition3){
9         <code_block_3>
10    }
11    else {
12        <code_block_4>
13    }
14
15    //NOT THE SAME AS
16    if (condition1) {
17        code block 1
18    }
19    if (condition2) {
20        code block 2
21    }
22    if (condition3) {
23        code block 3
24    }

```

Deze controle structuren zijn linked. => like one block the program wil check conditions until there is a condition that results `true`

If the first condition is false the statement will automatically check the next condition until there is an `else` statement or the chain ends.

This new condition has to be in an `else if` statement or an `else` statement. `else if` statement will check the new condition without any regard for the last system the `else` statement will only execute if none of the other conditions were met and end the link

`if` statements in succession just makes them execute individually, in order, unconditionally

BETTER EXPLENATION: https://www.geeksforgeeks.org/c-sharp-if-else-statement/?ref=header_outind

4. Logische bewerkingen

&&	AND
	OR
!	NOT

5. Interval checking

read cursus pls

6. Invoer robuust opvangen

```
1  string woord = " UPpOrDwn "  
2  
3  woord.ToUpper() //=> converts all char to UpperCase  
4  woord.ToLower() //=>converts all char to LowerCase  
5  
6  woord.Trim() //=> trims spaces in front and on the end of the string
```