Lab1

- All programs must start "**START**", "**MAIN**" and end with "**END**" in the following format: **START** ... **MAIN** ... **END**

- All commands must be ended by ";"

- All variables must declared just after "**START**" and must assign after "**MAIN**" like this:

    - In "**START**" section:

    Variable_type Variable_name;

        - **INT** i;

        - **NOT_INT** d;

        - **CHR** c;

    - After "**MAIN**" section;

    Variable_name := Value;

        - i := 5;

        - d := 2.5;

        - c := 'a';

- We have three types in our program:

    - "**INT**" stands for integers

    - "**NOT_INT**" for floats

    - "**CHR**" for characters

- Variables names may be any alphanumeric string, but they must start with a letter

- Statements between "**START**" and "**MAIN**" can be variable declaration, between "**MAIN**" and "**END**" can be an assignement.

- Comments can be written between '**!**' symbol, in the following format:

    - **!** Valid comment !

- Comments can't be written before "**START**" and after "**END**"

- Comments can be written after statement or before, but can't be written in the middle of statement

- Our program can be terminated after typing "**TERMINATE**."

- Only one declaration can be done in one line

- There are 6 arithmetic operatos: **'+', '-', '*', '/', '**', '%'**

- There are 3 logical operators: **"|", "&", "! ="**

- There are 5 comparison operators: **'<', '>', '<=', '>=', '='**

- Operator precedence looks like this:

Operator	Description
**	Exponent
( )	Parantheses
*, /, %	Multiplication, Division, Modulo
+, -	Addition, Subtraction
<, >, <=, >=, =	Comparison operators
!=	Logical NOT
&	Logical AND
|	Logical OR
:=	Assignment

- In my program conditional statement looks like this:

= > (a < b)

    OUTPUT b;

    FINISH

==

    OUTPUT a;

    FINISH

- While statement looks like this:

a := 10;

{ a > 0 }

    a := a - 1;

    OUTPUT a;

    FINISH