

Documentation of 1. part of IPP project implementation 2022/2023

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Submitted script *parse.php* supports base functionality. It has been implemented without OOP approach, but it is still relatively easy to expand it in case of new features.

Parsing

The input program is parsed line by line using combination of regular expressions and logic of program. Each line is first preprocessed by trimming whitespaces from each side of line, removing comments and separating line by whitespaces (or tabs) to array. Then the first element is array, which should be opcode of instruction is uppercased and looked for in switch case. Based on given opcode, other elements in array are processed. At last, generate functions are called in correct order and all of this is concatenated into *output* variable, which is echoed at STDOUT before program end. In case of wrong input, program ends with appropriate exit code and error message.

Program

Program is separated into functions. *Validate* functions are used for regex matching of input, if instructions and its parameters are correct. *Generate* functions are basically used for xml generation. *Main* function contains switch.