

Ministry of Education and Science of Ukraine

National Technical University "KhPI"

Educational and Scientific Institute of Computer Science and Informational Technology

Department of Computer Engineering and Programming

Course: *Programming. Part1*

REPORT on the laboratory work #7

Topic: "Recursion"

Prepared by:

Student of group KN-924e Nikita Afanasiev.

Checked by:

Associate Professor *Volodymyr SAVCHENKO*

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Task 7

Explanation

To solve one task from each category using recursion.

Command performed

```
mkdir lab_07
cd lab_07
code .
# some magic
gcc main.c && ./a.out
```

```
PROBLEMS OUTPUT PORTS TERMINAL GITLENS
● capy@capybara-pc ~/programming-labs/lab_07 lab_07 gcc main.c && ./a.out
Enter a number: 56734893

RECURSIVELY

The smallest digit in 56734893 is 3
Execution time for recursive - 0.000036s

ITERATIVE

The smallest digit in 56734893 is 3

Execution time for iterative - 0.000024s
Enter a number: 4

RECURSIVELY

Drawing a triangle of height 4:
#
##
###
####
Execution time for recursive - 0.000051s

ITERATIVELY

Drawing a triangle of height 4:
#
##
###
Execution time for iterative - 0.000010s
○ capy@capybara-pc ~/programming-labs/lab_07 lab_07
```

Tools

- OS: WSL Ubuntu
- Compiler: gcc
- Editor: VS Code