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# Project Summary

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## Requirements:

In order to run the application, python 3.4 or newer must be installed on your computer.

The application was built on a UNIX operating system so a few changes are necessary in order for it to run on a Windows computer.

## Author:

The application was build by Blaj Andrei-Sorin, in group 911.

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## Operations:

The implemented operations are:

- ADDITION
- SUBTRACTION
- MULTIPLICATION
- INTEGER DIVISION

For every operation the numbers must be in the correct base, the program will check for this i.e. 2, 3, ... , 16

## Conversions:

The implemented conversions are:

- Successive divisions for integer numbers
- Rapid conversions

## User Interface

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The application is a console based application, the user interface consists of a menu alongside an input possibility.

```
Please choose an operation:
 1. Addition
 2. Subtraction
 3. Multiplication by one digit
 4. Division by one digit
 5. Rapid Conversions
 6. Successive divisions / multiplications conversion method
 0. Exit
~: █
```

The structure of the program:

```
MAIN.PY
  -> UI.PY
    -> NUMBER.PY
```

For the operations you will be prompted by a couple of input fields:

```
Insert the first number: 123
Insert the second number: 1234
Insert the first number's base: 10
Insert the second number's base: 10 █
```

The result will be printed to the screen:

```
1357
Please choose an operation:
 1. Addition
 2. Subtraction
 3. Multiplication by one digit
 4. Division by one digit
 5. Rapid Conversions
 6. Successive divisions / multiplications conversion method
 0. Exit
~: █
```

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For the conversions you will be prompted by a couple of input fields different than the ones before:

```
Insert the number: 123,42
Insert the number's base: 8
Insert the conversion base: 16
```

The result will be printed to the screen:

```
53,88
Please choose an operation:
 1. Addition
 2. Subtraction
 3. Multiplication by one digit
 4. Division by one digit
 5. Rapid Conversions
 6. Successive divisions / multiplications conversion method
 0. Exit
~: 
```