## User's manual

Main user interface consists of menu. Menu has 4 options.

Options are to print statistics of Morse code and alphabetical characters. convert text into Morse code, convert Morse code into text, prints the all history of user's inputs and output and exit from the program.

```
C:\Users\Erdenechuluun\Desktop\Ec\bin\Debug\Ec.exe

@. Print the statistic
i. Convert text into Morse
2. Morse code into text
3. History of results
4. Exit
: @-4
```

Firstly, user must enter number from 1 to 4 to choose operations.

## **Operations:**

- 1. Prints the statistics of Morse code and alphabetical characters.
- 2. Converts text into Morse code
- 3. Converts Morse code into text
- 4. Prints the all history of user's inputs and outputs
- 5. Exits

Secondly, user may enter text or code to convert.

Warning, program runs until user enter option number 4. Other options won't terminate program.

## Instructions:

If user chose **menu item 0**, program will print the statistics

**Menu item 1**, user may enter texts to convert. Program doesn't convert numbers, but only Latin alphabetical letters.

**Menu item 2**, user may enter Morse code with space to avoid confusion with characters.

For example: 3 dots are "S" character or triple "E" characters.

Menu item 3, program prints the history

Menu item 4, program terminates.

Picture guide to use program:

```
Print the statistic
                                     Print the statistic
                                 1. Convert text into Morse
2. Morse code into text
3. History of results
1. Convert text into Morse
Morse code into text
                                  4.
                                     Exit
History of results
                                 : 1
4. Exit
                                  Give a text to convert
```

User enter the number, then enter the text to convert.

```
0. Print the statistic
1. Convert text into Morse
2. Morse code into text
3. History of
       Print the statistic
      Convert text into Morse

    Morse code into text
    History of results

                                                       4. Exit
 4. Exit
                                                       : 1
: 1
Give a text to convert
Hello World!
                                                      Give a text to convert
Hello World!
                                                       Result: ....
       Print the statistic
      Convert text into Morse
     Morse code into text
History of results
 4. Exit
4. EXIT

1
Give a text to convert
Hello World!
Result: ... -.. -.

0. Print the statistic
1. Convert text into Morse
2. Morse code into text
3. History of results
      History of results
      Exit
```

Program runs until user enter operation number 4.

```
Print the statistic
   Print the statistic
                                                          Convert text into Morse
Morse code into text
   Convert text into Morse

    Morse code into text
    History of results

                                                           History of results
4. Exit
: 2
                                                           Exit
                                                        : 2
Give a Morse code to convert
Give a Morse code to convert
                                                        Result: helloworld
                                                                                            .-. .-.. -..
```

Example of using operation 2.

Operation number 3.

```
0. Print the statistic
1. Convert text into Morse
2. Morse code into text
3. History of results
4. Exit
: 4

Process returned 0 (0x0) execution time : 69.047 s
Press any key to continue.
```

Operation number 4, program terminates.

Exceptions and wrong use:

```
Print the statistic
1.
2.
3.
4.
5
   Convert text into Morse
    Morse code
                  into text
    History of
                   results
   Exit
    Print the statistic
   Convert text into Morse
Morse code into text
History of results
    Exit
Give a Morse code to convert
Result:
          nenn
0.
    Print the statistic
    Convert text into Morse
Morse code into text
3.
4.
    History of
                  results
    Exit
```

If user enter wrong number of operations, program will refresh.