

Lab 1.7.2 Near zero float numbers

Objectives

Familiarize the student with:

- operations on float numbers;
- comparing two float values.

Scenario

All operations on float numbers should be made while keeping one thing in mind: they are not entirely accurate. If we're comparing two float numbers, we must use an epsilon comparison. Write code to check if two given numbers differ by only a small value (i.e. 0.000001). Ask for two integer numbers from the user. Divide 1 by each of them (1 by the first number and 1 by the second number) and compare the results of this operation. Print the information to the user. Remember to convert to floats before dividing.

Example input

```
1
1
```

Example output

```
Results are equal (by 0.000001 epsilon)
```

Example input

```
1011
1112
```

Example output

```
Results are not equal (by 0.000001 epsilon)
```