

CSC9V4 Practical 3

Practice with I/O

Introduction

We are using I/O functions to practice with C approach to programming.

More on adding fractions ...

1. Modify the addfrac.c program so that it can input and **multiply** two fractions.
2. Further modify the program so that the user input a char and two fractions. **IF** the char is *a* then the two fractions are added, if the char is *m* then the two fractions are multiplied.
3. Modify the program in 2. so that it can accept fractions with a space in between numbers, e.g.

2_/_3

where _ is a space (or more spaces?).

4. The program in 3 must return results as fractions, i.e. $1/4 + 1/4$ returns $2/4$. Same for multiplications.
5. Modify the program in 4. so that the returned result consists of both the fraction and the numeric value, e.g. $2/4$ and 0.5.
6. (advanced) Modify the program in 5. so that the output contains irreducible fractions only, i.e. $1/2$ and not $2/4$.

More on scanf() ...

Consider the input 10.3 5.6 100 (with one or more spaces in between numbers). What would be the value of *x*, *y*, *i* after the execution of `scanf()` in the code fragment below?

WRITE FIRST THE RESULT ON PAPER AND THEN BUILD AND RUN THE PROGRAM, which also prints in a nice format the values for the three variables. IF different from your hypothesis, write a note on why it is different/what you got wrong in your hypothesis.

```
float x,y;
int i;
...
scanf("%f%d%f", &x, &i, &y);
```

Check Point