## Super Calculator



Most calculators can calculate exact up to about 10 digits. Cheap ones can do 8 digits, while expensive ones can do a little better and have 12 digits resolution. As an example, a Casio fx-4500P gives as a result of the calculation

1234567 x 1234567 = 1.524155677E12

Clearly some information is lost somewhere.

## Write a program that can calculate with (complete) numbers up to 100 digits without losing precision.

The program should be able to do addition, subtraction and multiplication and should signal when underflow (subtraction) or overflow (addition, multiplication) occurs.

- Work in groups of 2.
- Use C for the program. Hand in your work on a floppy 1.4 MB.
- Deadline: 15 December 2003
- Counts for 20% of final note (together with 80% of exam).
- Who has more than or equal to 15 has to come and talk to a docent.
- Without handing in the work and passing with a mark of at least 10, you will not be admitted to the exam or exam de recurso.
- Students who hand in work equal to others will be barred from the exams.



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