

# Power and faculty

<b>Difficulty:</b>	Medium
<b>Requirements:</b>	Variables, input/output, loops
<b>Aims:</b>	Calculating with loops

- Write a program that takes two numbers  $a, b$  from the user and calculates  $a^b$  and  $b^a$
- **Experts:** Write a program that calculates the factorial of the user input.

## Hints

- **Experts:** The factor changes in each step.