

Exercise 1

Last update January 24, 2026

This exercise sheet must be handed in via LearnIT.

You solve and handin your assignment as a group.

Your name must be part of the filename, e.g., FP-01-<group><name><name>.fsx. An example:
FP-01-DeEnesteTo-MadsAndersen-KirstenKnudsen.fsx.

You can only hand in one file and it must be of type fs or fsx.

It is important that you annotate your own code with comments. It is also important that you apply a functional style, i.e., no loops and no mutable variables.

You can see corresponding Java solutions in file handin01_1.java.

You are not allowed to use any AI tooling.

Exercise 1.1 Write a function `sqr:int->int` so that `sqr x` returns x^2 .

Exercise 1.2 Write a function `pow : float -> float -> float` so that `pow x n` returns x^n .

You can use the library function: `System.Math.Pow`.

Exercise 1.3 Solve HR, exercise 1.1

Exercise 1.4 Solve HR, exercise 1.2

Exercise 1.5 Solve HR, exercise 1.4

Exercise 1.6 Solve HR, exercise 1.5

Exercise 1.7 Solve HR, exercise 1.6

Exercise 1.8 Solve HR, exercise 1.7

The function `fact` is found on page 8 in HR.

The function `power` is found on page 11 in HR.

Exercise 1.9 Solve HR, exercise 1.8