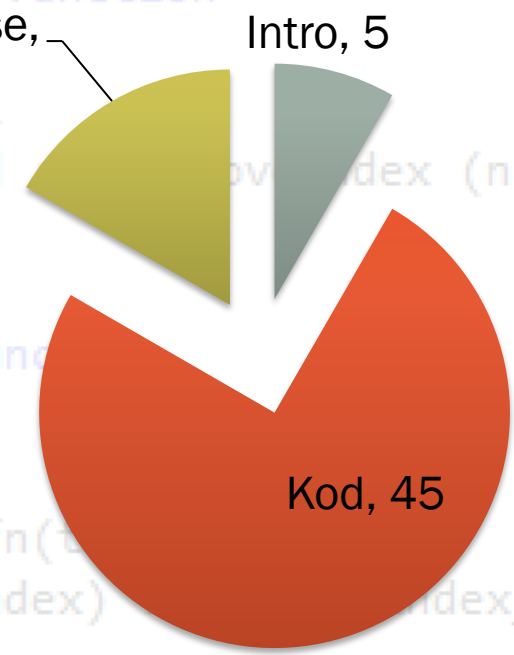
SKÄRP DIN SÅG

60 MIN



PAR

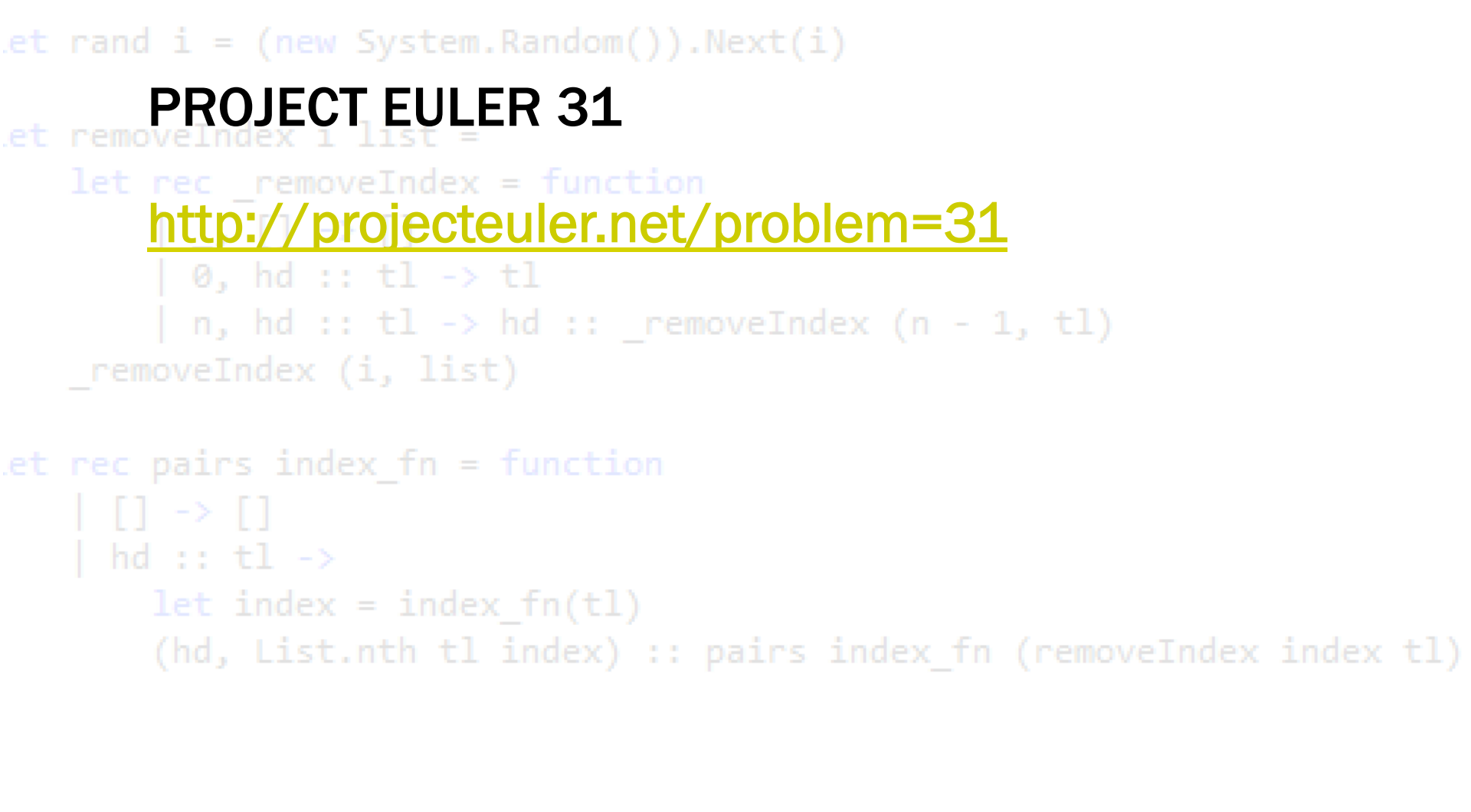
```
let rand i = (new System.Random()).Next(i)

let removeIndex i list =
    let rec _removeIndex = function
        | _, [] -> []
        | 0, hd :: tl -> tl
        | n, hd :: tl -> hd :: _removeIndex (n - 1, tl)
    _removeIndex (i, list)

let rec pairs index_fn = function
    | [] -> []
    | hd :: tl ->
        let index = index_fn(tl)
        (hd, List.nth tl index) :: pairs index_fn (removeIndex index tl)
```

PROJECT EULER 31

http://projecteuler.net/problem=31



PROBLEM 31

In England the currency is made up of pound, £, and pence, p, and there are eight coins in general circulation:

1p, 2p, 5p, 10p, 20p, 50p, £1 (100p) and £2 (200p).

It is possible to make £2 in the following way:

1£1 + 150p + 220p + 15p + 12p + 31p

How many different ways can £2 be made using any number of coins?

LÖSNINGSPRESENTATION

```
let rand i = (new System.Random()).Next(i)

let removeIndex i list =
    let rec _removeIndex = function
        | _, [] -> []
        | 0, hd :: tl -> tl
        | n, hd :: tl -> hd :: _removeIndex (n - 1, tl)
    _removeIndex (i, list)

let rec pairs index_fn = function
    | [] -> []
    | hd :: tl ->
        let index = index_fn(tl)
        (hd, List.nth tl index) :: pairs index_fn (removeIndex index tl)
```