

SKÄRP DIN SÅG

60 MIN

```
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
```

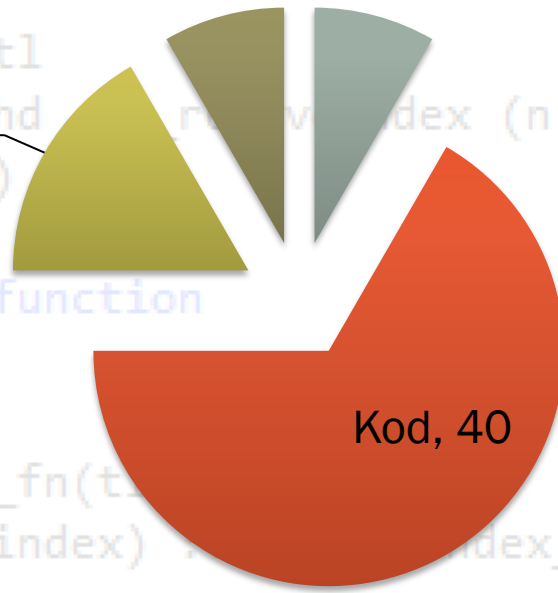
```
(hd, List.nth tl index) :: pairs index_fn (removeIndex index tl)
```

Utvärdering, 5

Intro, 5

Redogörelse, 10

Kod, 40



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PAR

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        let index = index_fn(tl)
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        (hd, List.nth tl index) :: pairs index_fn (removeIndex index tl)
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PROJECT EULER 28

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let removeIndex i list =
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<http://projecteuler.net/problem=28>

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_removeIndex (i, list)
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(hd, List.nth tl index) :: pairs index_fn (removeIndex index tl)
```

PROBLEM 28

Starting with the number 1 and moving to the right in a clockwise direction a 5 by 5 spiral is formed as follows:

21	22	23	24	25
20	7	8	9	10
19	6	1	2	11
18	5	4	3	12
17	16	15	14	13

It can be verified that the sum of the numbers on the diagonals is 101.

What is the sum of the numbers on the diagonals in a 1001 by 1001 spiral formed in the same way?

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

LÖSNUNGSPRESENTATION

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let removeIndex i list =
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  let rec _removeIndex = function
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```
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    let index = index_fn(tl)
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```
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```

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

UTVÄRDERING

```
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```

```
let rec _removeIndex = function
```

- Format

- Uppgift

```
| n, hd :: tl -> hd :: _removeIndex (n - 1, tl)
```

```
_removeIndex 0 [] = []
```

- Hur lockar vi hit fler?

```
let rec pairs index_fn = function
```

```
| [] -> []
```

```
| hd :: tl ->
```

```
let index = index_fn(tl)
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```
(hd, List.nth tl index) :: pairs index_fn (removeIndex index tl)
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