

Introduktion til Programmering og Problemløsning (PoP)

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Tupler

```
$fsharpi
```

```
...
```

```
> let a = (1, 1.0);;
```

```
val a : int * float = (1, 1.0)
```

Produkttype

Funktioner til
at indicerer i
par

```
> printfn "%A %A" (fst a) (snd a);;
```

```
1 1.0
```

```
val it : unit = ()
```

Parentes unødvendig
men anbefales

```
> let b = 1, "en", '\049'
```

```
val b : int * string * char = (1, "en", '1')
```

Venstre side af en binding
kan have navngivne tuple-
elementer

```
> let (b1, b2, b3) = b;;
```

```
val b3 : char = '1'
```

```
val b2 : string = "en"
```

```
val b1 : int = 1
```

Hele typen - ikke enkelt-
elementer kan være
mutérbare

```
> let mutable c = (1,2)
```

```
- c <- (2,3)
```

```
- printfn "%A" c;;
```

```
(2, 3)
```

```
val mutable c : int * int = (2, 3)
```

```
val it : unit = ()
```

Decimal til Binær

```
let N = 116
let mutable n = N
let mutable str = ""
while n > 0 do
    let rest = n % 2
    n <- n / 2
    if rest > 0 then
        str <- "1"+str
    else
        str <- "0"+str
printfn "%d_10 = %s_2" N str
```

```
let N = 116
let mutable n = N
let mutable str = ""
while n > 0 do
    str <- (if n % 2 > 0 then "1" else "0") +
str
    n <- n / 2
printfn "%d_10 = %s_2" N str
```

Resumé

I denne video hørte du om:

- Tupler
- Mønstre
- Division-med-2 algoritmen som et program