Programmering og Problemløsning

3.1: Præcedens, association og virkefelter

Nøglekoncepter

- Talsystemer (decimal, binær, octal, hexadecimal)

- Heltal, flydende tal, tegn, strenge
- Typer og operatorer

Type	int	float	char	string	float	float
Tre	3	3.0	‘3’	“3”	3e0	3.0e0

Operatorer og præcedens

Operatorer og typer

3 + 4

3.0 + 4.0

~~3 + 4.0~~

5 / 2

5 % 2

2 * (5 / 2) + 5 % 2

2.0 ** 3.0

pown 2 3

"hej " + "med " + "dig"

Operatorer og præcedens

Operatorer og typer	Præcendens og association
3 + 4	exp 0.0
3.0 + 4.0	exp 1.0
~~3 + 4.0~~	(exp 0.0) + 1.0
5 / 2	2.0 **(3.0 ** 4.0)
5 % 2	(2.0 / 3.0) / 4.0
2 * (5 / 2) + 5 % 2	
2.0 ** 3.0	
pown 2 3	
"hej " + "med " + "dig"	

Operator	Associativity	Description
+<expr>, -<expr>, ~~~<expr>	Left	Unary identity, negation, and bitwise negation operator
f <expr>	Left	Function application
<expr> ** <expr>	Right	Exponent
<expr> * <expr>, <expr> / <expr>, <expr> % <expr>	Left	Multiplication, division and remainder
<expr> + <expr>, <expr> - <expr>	Left	Addition and subtraction binary operators
<expr> ^^^ <expr>	Right	bitwise exclusive or
<expr> < <expr>, <expr> <= <expr>, <expr> > <expr>, <expr> >= <expr>, <expr> = <expr>, <expr> <> <expr>, <expr> <<< <expr>, <expr> >>> <expr>, <expr> &&& <expr>, <expr> ||| <expr> ,	Left	Comparison operators, bitwise shift, and bitwise 'and' and 'or'.
<expr> && <expr>	Left	Boolean and
<expr> || <expr>	Left	Boolean or

String slicing,boolske værdier og operatorer

Slicing	Boolske værdier og operatorer	Sammenligninger
"abcdefghijkl".[1] = 'b'	true = 1	3 < 4
"abcdefghijkl".[1..4] = "bcde"	false = 0	3 > 4
"abcdefghijkl".[..4] = "abcde"	a && b	3 <> 4
"abcdefghijkl".[4..] = "efghijkl"	a || b	3 = 4
"abcdefghijkl".Length = 12	not a	~~not 3 = 4~~
"abcdefghijkl".[0..11] = "abcdefghijkl"		not (3 = 4)