4.4. Numeric Types — int, float, complex

Operation	Result
x + y	sum of x and y
x - y	difference of x and y
x * y	product of x and y
x / y	quotient of x and y
x // y	floored quotient of x and y
x % y	remainder of x / y
-X	x negated
+X	x unchanged
abs(x)	absolute value or magnitude of x
int(x)	x converted to integer
float(x)	x converted to floating point
<pre>divmod(x, y)</pre>	the pair (x // y, x % y)
pow(x, y)	x to the power y
x ** y	x to the power y
complex(re, im)	a complex number with real part <i>re</i> , imaginary part <i>im</i> . <i>im</i> defaults to zero.
<pre>c.conjugate()</pre>	conjugate of the complex number c

Operation	Result	Notes
math.trunc(x)	x truncated to Integral	
round(x[, n])	x rounded to n digits, rounding half to even. If n is omitted, it defaults to 0.	
math.floor(x)	the greatest integral float $\leq x$	
<pre>math.ceil(x)</pre>	the least integral float $>= x$	

4.4.1. Bitwise Operations on Integer Types

Operation	Result	Notes
x y	bitwise <i>or</i> of <i>x</i> and <i>y</i>	
x ^ y	bitwise <i>exclusive or</i> of <i>x</i> and <i>y</i>	
x & y	bitwise <i>and</i> of <i>x</i> and <i>y</i>	
x << n	x shifted left by n bits	(1)(2)
x >> n	x shifted right by n bits	(1)(3)
~X	the bits of x inverted	

4.6. Sequence Types — list, tuple, range