Appendix A: Integer Operators

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This documentation was generated from the Python documentation available by typing *help*(*int*) in the Python shell. In this documentation the variables *x*, *y*, and *z* refer to integers. The official Python 3 documentation is at http://docs.python.org/3/.

Operator	Returns	Comments
x + y	int	Returns the sum of x and y
x − y	int	Returns the difference of x and y
x*y	int	Returns the product of x and y
x/y	float	Returns the quotient of x divided by y
x//y	int	Returns the integer quotient of x divided by y
x%y	int	Returns x modulo y. This is the remainder of dividing x by y
−x	int	Returns the negation of x
x&y	int	Returns the bit-wise *and* of x and y
x | y	int	Returns the bit-wise *or* of x and y
xy	int	Returns the bit-wise *exclusive or* of x and y
x<<y	int	Returns a bit-wise shift left of x by y bits. Shifting left by 1 bit multiplies x by 2
x>>y	int	Returns a bit-wise right shift of x by y bits
˜x	int	Returns an integer where each bit in the x has been inverted. $x + ˜x = -1$ for all x
abs(x)	int	Returns the absolute value of x
divmod(x, y)	(q,r)	Returns the quotient q and the remainder r as a tuple
float(x)	float	Returns the float representation of x
hex(x)	str	Returns a hexadecimal representation of x as a string
int(x)	int	Returns x
oct(x)	str	Return an octal representation of x as a string
pow(x, y[, z])	int	Returns x to the y power modulo z. If z is not specified then it returns x to the y power
repr(x)	str	Returns a string representation of x
str(x)	str	Returns a string representation of x