

Digital Data

Computer programs can process a wide variety of data, from numbers and text to images and video. But how is data represented digitally inside a computer?

Data
Information that can be stored in a computer, including: numbers, text, images, and device inputs.

Input
The data and user actions received by a computer program.

Program
A software application that runs on a computer, producing some outputs for some given inputs.

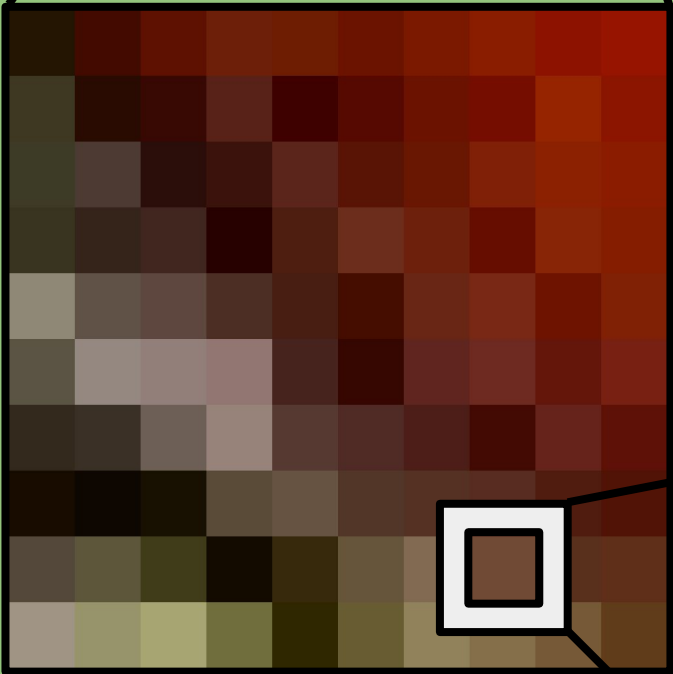
Output
The resulting data and actions produced by a computer program.



Automatic Photo Captioner

A kea on a snowy mountain top.

Execute
To run a program with a particular set of inputs.



Colour	Red	Green	Blue
Hex#	70	4A	36
Dec#	112	74	54

ASCII Encoding				
Character	t	o	p	.
Dec#	116	111	112	46

Pixel
Short for "picture element". The smallest unit of data in a digital image, representing the colour of a single, tiny square.

Binary
A number system with only two possible values: 1 and 0

Bin#	0	1	1	1	0	0	0	0
112								

Bit
Short for "binary digit". A single 1 or 0 in a binary number. The smallest unit of digital data.

Byte
A binary number of 8 bits representing a decimal value between 0 and 255. A common fundamental unit of data storage seen in: kilobytes (kB), megabytes (MB), etc.