## Blocks Function Reference Manual

| Operators |  |
| :---: | :---: |
|  | Basic math operators |
| average | Calculate the average. <br> Tips: Other blocks can be combined within this one. See below: |



| Variables |  |
| :---: | :---: |
| 圁 | The icon means you can embed other blocks |
| features of $\square$ in language ${ }^{\text {P }}$ | Convert the word to a 300 －dimensional vector |
| distance from features $\square$ to $\square$ | Calculate the（Euclidean）distance between two vectors |
| map $\square$ on each element of $\square$ and $\square$ | Do an operation on two vectors |
| closest word in language not includng | Find the closest word to a vector and return a word |
| closest words to $\square$ in language and include distances $\sqrt{ }$ O | Input the vector of a word and it will return a list of the similar words under the order of distance． |
| list | A list block，it could contain several words or numbers． |
| Iength of | Get the length of a vector or a list |
| Item $\cdot \rightarrow$ of E | Get the value of one dimension of a vector．The first，last and random options are provided |
| delete $\rightarrow$ of $\square$ | Delete the value of one dimension of a vector．The first，last and all options are provided． |
| replace item $1 \geqslant$ of $⿴ 囗 ⿱ 一 一 ⿻ 上 丨 匕 刂$ with | Replace the value of one dimension of a vector．The first，last and random options are provided． |
|  | Calculate the distance of two words using the vector |
|  | The analogy of word embedding．It maintains the relevance analogy between word vectors． |

## Tips：

Snap！programming，which is the equivalent of building blocks．When a block is blank，you can try to drag a different Block in，combine two blocks，and see what happens！

