**Binary Search**

* Begin with the mid element of the whole array as a search key.
* If the value of the search key is equal to the item then return an index of the search key.
* Or if the value of the search key is less than the item in the middle of the interval, then cut it in to lower half.
* Otherwise, cut it to the upper half.
* Repeatedly check from the second point until the value is found or the interval is empty.

Basic formula is (1st value + last value)/2