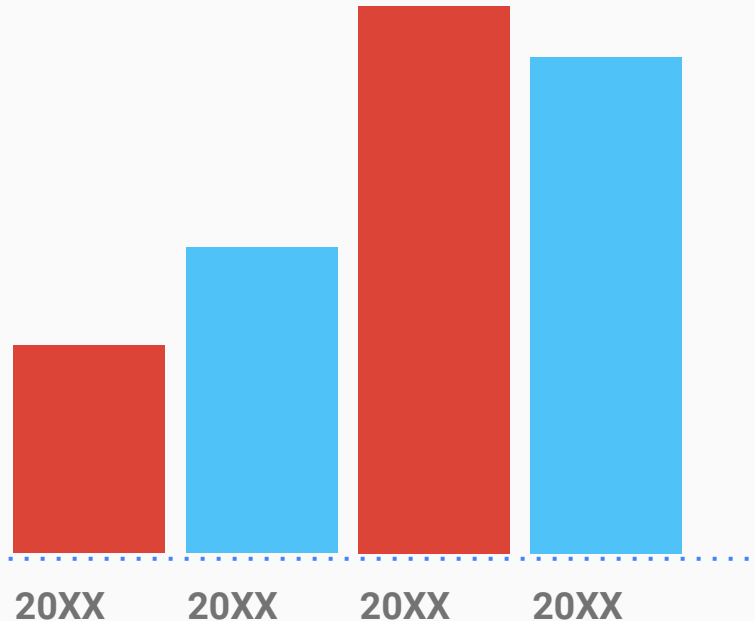


Searching machine

The problem

C language provides a simple `bsearch` function which uses binary search algorithm ,that can only be used to determine whether an element is present in the array or not. It does not tell us at which index the element is actually present.



The solution

Fibonacci Search Algorithm

Step 1

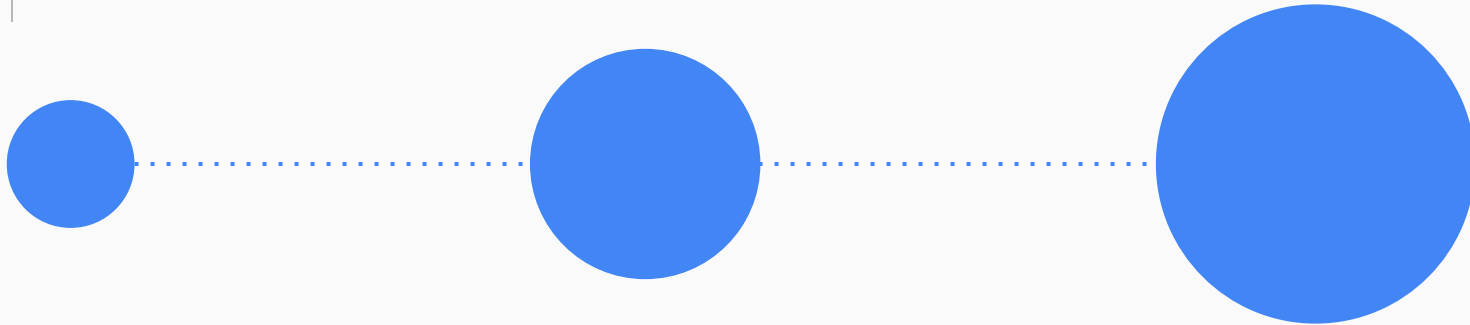
Linear Search is a good algorithm but has high time complexity.

Step 2

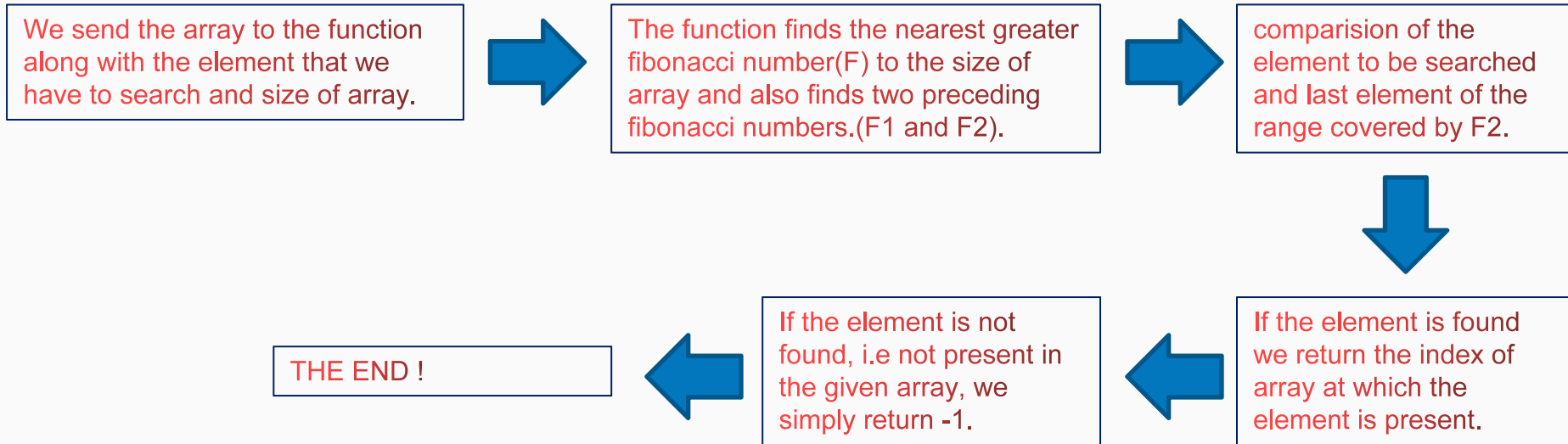
Binary Search is a good algorithm but inefficient for large data sets.

Step 3

Fibonacci search algorithm is time efficient as well as efficient for large data sets.



How it works (Architecture Diagram)



Demo

1. Create a Makefile using vim editor.

Write in terminal : `vim Makefile`

2. After creating the file, to execute the Makefile ,

Write in terminal : `make`

3. After executing the make file , we need to execute the code,

Write in terminal : `./file_name`

4. You will be able to see the output in your terminal.