

## Searching:

→ Process of finding the desired information from the set of items stored in the form of elements in the computer memory.

→ 2 types of searching

Linear search

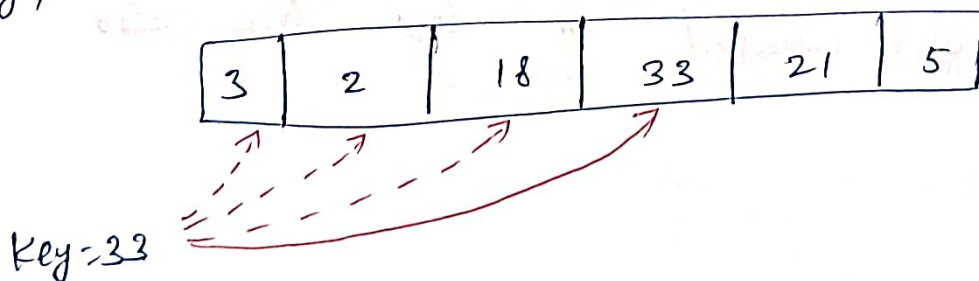
Binary "

Linear search:

→ Linear search is the simplest searching technique.

→ search begins at one end of the list & search one by one until element found.

Eg-1



→ key value '33' compared with elements in array until it finds exact match

→ linear search is implemented by using array implementation.

→ simplest searching

Routine :

```
int linear ( int a[], int n, int key )  
{  
    int i;  
    for (i=0; i < n; ++i)  
        if (a[i] == key)  
            return a[i];  
}
```

Advantage:

- ① Simple
- ② Does not require the list to be sorted in a particular order

Disadvantages:

- ① In efficient for large size list.

Ben