

## Improving Linear Search

- When you are searching for a key element there is a possibility that you are searching the same element again
- To improve the speed of comparison , you can move a key element repeatedly search one step forward this method is called transposition

Syntax :

```
for( i = 0; i < length ; i++ )  
    {  
        if( key == A[ i ] )  
        {  
            swap( A[i], A[i-1]);  
            return i-1;  
        }  
    }
```

- The second method is you can directly swap the key element to the first element this process is called move to head . The next search for the same element becomes faster.

```
for( i = 0; i < length ; i++ )  
    {  
        if( key == A[ i ] )  
        {  
            swap( A[i], A[0]);  
            return 0;  
        }  
    }
```