SEARCHING ALGORIITHM

Searching algorithms are methods or procedures used to find a specific item or element within a collection of data.

ADVANTAGES OF SEARCHING ALGORITHM.

1.Simplicity: Easy to implement and understand. 2.No Requirement for Sorted Data: Can be used on unsorted data. 3.Versatility: Works well for small datasets.

DISADVANTAGES OF SEARCHING ALGORITHM.

1.Inefficiency: Linear search has a time complexity of O(n), making it inefficient for large datasets. 2.High Comparison Count: It may require up to n comparisons to find the desired element, leading to slow performance.

```
# BY LIST
A=[5,10,8,6,2,3,7]
target=int(input("enter any number"))
for x in A:
  if target==x:
    print("Key in list")
    break

else:
  print("Key not in list")
```

```
enter any number8
Key in list
```

```
# BY ARRAY
import array
from array import *
a=array("i",[5,10,8,6,2,3,7])
target=int(input("enter your target "))
for x in a:
  if target==x:
    print("key in array")
    break
else:
  print("key not in array")
```

```
enter your target 8
key in array
```