Write an alogorithm to depict Binary Search.

Solution:-

```
Def. binary Search(A,x):
n=len(A)
beg=0
end=n-1
result=-1
while(beg<=end);
        mid=(beg+end)/2
        if(A[mid]<=x):
        beg=mid+1
        result=mid
        Else:
        end=mid-1
Return result
```

Binary Search Time Complexity:

- Best Time Complexity: O(1)
- Average Time Complexity: O(logn)
- Worst Time Complexity: O(logn)