## **BinarySearch Algorithm**

```
Int a[5] ={10,20,30,40,50] Take one array with any size *** Array should be in Sorted order
L = 0, h = 4, f = 0, mid, item define lowest, highest indexes and mid, f and item those are variable
Item = input take the iteam as user input for searching in array
While (I <= h) compare lowest and highest indexes then
{
   Mid = (I + h)/2 finding the middle element using this formula
   If (a[mid] == item ) compare middle element with item .....(1)
   {
      F = 1 if the above condition meets then declare f = 1
     Break Break the loop and exit from the loop
   }
  If a[mid] > item ) if the above condition not meets then check array[middle] > item............2
    {
       L = mid + 1 set lowest = middle + 1
    }
  Else
    {
      H = mid - 1 condition 2 not meets then declare highest = middle - 1
    }
} continue this while loop upto where condition fails and then
If (f == 1) check weather the item has founded or not
{
Item found with the location (mid) if founded then print
}
Else
{
Item not found not founded then send a message
}
```