

```

package method_programs;

import java.util.Scanner;

public class binary {

    public static int binarys(int num[],int t,int r ,int l) {
        while(l<=r) {
            int mid=l+(r-1)/2;
            //mid[];

            if(num[mid]==t) {
                return mid;
            }
            if(t>num[mid]) {
                l=mid+1;

            }
            else {
                r=mid-1;
            }
        }
        return -1;
        //return mid(arr.length-1);
    }

    public static void main(String[] args){
        Scanner s=new Scanner(System.in);
        System.out.println("Enter the number to find:");
        int num[]={5, 7, 11, 15, 20, 30, 45, 89, 97};
        int n=num.length;
        int t=s.nextInt();
        int loc=binarys(num,t,n-1,0);
        //int mid=0;
        if(loc==-1)
            System.out.println("Element not found");
        else
    
```

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        System.out.println("Element "+t+" is found at  
location: "+loc);  
  
        //System.out.println();  
    }  
  
}
```

Output:

Enter the number to find:

15

Element 15 is found at location: 3