

eclipse-workspace - PracticeProject3/src/ExponentialSearch.java - Eclipse IDE

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```
1 import java.util.Arrays;
2
3 public class ExponentialSearch {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7         int[] arr = {6,12,18,24,32};
8         int length= arr.length;
9         int value = 18;
10        int outcome = exponentialSearch(arr,length,value);
11
12        if(outcome<0){
13
14            System.out.println( "Element is not present in the array");
15
16        }else {
17
18            System.out.println( "Element is present in the array at index :"+outcome);
19
20        }
21    }
22
23    public static int exponentialSearch(int[] arr ,int length, int value ){
24
25        if(arr[0]==value){
26            return 0;
27        }
28        int i=1;
29        while(i<length && arr[i]<=value){
30
31            i=i*2;
32        }
33        return Arrays.binarySearch(arr,i/2,Math.min(i,length),value);
34    }
35 }
```

