|  |
| --- |
| package vandana.projects.com; |
|  |  |
|  | import java.util.Arrays; |
|  |  |
|  | public class ExponentialSearch { |
|  |  |
|  | public static void main(String[] args) { |
|  | int[] arr = {6,12,18,24,32}; |
|  | int length= arr.length; |
|  | int value = 18; |
|  | int outcome = exponentialSearch(arr,length,value); |
|  |  |
|  | if(outcome<0){ |
|  |  |
|  | System.out.println( "Element is not present in the array"); |
|  |  |
|  | }else { |
|  |  |
|  | System.out.println( "Element is present in the array at index :"+outcome); |
|  | } |
|  |  |
|  |  |
|  |  |
|  | } |
|  | public static int exponentialSearch(int[] arr ,int length, int value ){ |
|  |  |
|  | if(arr[0]==value){ |
|  | return 0; |
|  | } |
|  | int i=1; |
|  | while(i<length && arr[i]<=value){ |
|  |  |
|  | i=i\*2; |
|  | } |
|  | return Arrays.binarySearch(arr,i/2,Math.min(i,length),value); |
|  | } |
|  |  |
|  |  |
|  |  |
|  | } |