//PEAK OF ARRAY

#include<stdio.h>

int peak(int a[],int low,int high,int n)

{

int mid=(low+high)/2;

if((mid==0||a[mid-1]<=a[mid])&&(mid==n-1||a[mid+1]<=a[mid]))

return a[mid];

else if(mid>0||a[mid-1]>a[mid])

return peak(a,low,mid-1,n);

else

return peak(a,mid+1,high,n);

}

void main()

{

printf("Enter the number of values :");

int n,i;

scanf("%d",&n);

int a[n];

printf("Enter the elements\n");

for(i=0;i<n;i++)

{

scanf("%d",&a[i]);

}

printf("The peak value of array is :%d\n",peak(a,0,n-1,n));

}