#include <stdio.h>

#include<stdlib.h>

#define N 100

void swap(int\* a, int\* b)

{

int temp = \*a;

\*a = \*b;

\*b = temp;

}

void heapify(int arr[], int n, int i)

{

int left, right, largest;

largest = i;

left = 2 \* i + 1;

right = 2 \* i + 2;

if (left < n && arr[left] > arr[largest])

largest = left;

if (right < n && arr[right] > arr[largest])

largest = right;

if (largest != i) {

swap(&arr[i], &arr[largest]);

heapify(arr, n, largest);

}

}

void heap\_sort(int arr[], int n)

{

int i;

for (i = (n / 2) - 1; i >= 0; i--)

heapify(arr, n, i);

for (i = n - 1; i >= 0; i--) {

swap(&arr[0], &arr[i]);

heapify(arr, i, 0);

}

}

int main()

{

int arr[N];

int n, i,k,s;

printf("Enter number of cookies: ");

scanf("%d",&n);

printf("Enter the sweetness you want: ");

scanf("%d",&k);

printf("Enter the sweetness of cookies one by one:\n");

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

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

printf("Sweetness of cookies:\n");

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

printf("%d ", arr[i]);

heap\_sort(arr, n);

printf("\nAfter performing Heap Sort:\n");

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

printf("%d ", arr[i]);

i=0;

repeat:

{

if(arr[i]<k)

{

s=arr[0]+arr[1];

arr[0]=s;

for(i=1;i<n-1;i++)

{arr[i]=arr[i+1];}

printf("\nArray:\n");

for(i=0;i<n-1;i++)

{ printf("%d ",arr[i]);}

i++;

}

else

exit(1);

}

for(i=0;i<n-1;i++){

if(arr[i]<k)

goto repeat;

}

return 0;

}

#include <stdio.h>

#define N 100

int k,arr[N],i,j,temp,n,sum;

void sort(int [],int n);

void dis(int [],int n);

void mitha();

int main() {

printf("Input k : ");

scanf("%d",&k);

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

scanf("%d",&n);

printf("Enter the sweetness of cookies : ");

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

{

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

}

repeat:

sort(arr,n);

dis(arr,n);

mitha();

for(i=1;i<n-1;i++)

{

arr[i]=arr[i+1];

}

dis(arr,(n-1));

for(i=0;i<(n-1);i++)

{

if(arr[i]<=k)

{

n=n-1;

goto repeat;

}

else

{

n=n-1;

printf("Final sweetness of all cookies : ");

dis(arr,n);

}

}

return 0;

}

void sort(int arr[],int n)

{

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

{

for(j=i+1;j<n;j++)

{

if(arr[i]>arr[j])

{

temp=arr[i];

arr[i]=arr[j];

arr[j]=temp;

}

}

}

}

void dis(int arr[],int n)

{

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

{

printf(" %d",arr[i]);

}

printf("\n");

}

void mitha()

{

sum=arr[0]+arr[1];

arr[0]=sum;

}