1. Emma wants to gift a bouquet to her father on his birthday and asks for help from her mother Rosy. Rosy gives N ower sticks numbered 1 to N to Emma and tells her to arrange it in the bouquet in a particular order. She asks her to arrange the rst K ower sticks in an order of their increasing length and the remaining sticks in an order of their decreasing length. Write an algorithm to nd the nal arrangement of the ower sticks in which Emma gifted the bouquet to her father. Sample Input 0 8 3 7 9 4 3 45 76 1 2 Sample Output 0 4 7 9 76 45 3 2 1

Solution

#include<stdio.h>

int main()

{

int n,key,outer,inner,temp,ind;

scanf("%d",&n);

int arr[n];

scanf("%d",&key);

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

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

for(outer=0;outer<key;outer++)//key = 4 (4 7 9 3 45 17)

{

for(inner=0;inner<key-1;inner++)

{

if(arr[inner]>arr[inner+1])

{

temp=arr[inner];

arr[inner]=arr[inner+1];

arr[inner+1]=temp;

}

}

}

for(outer=key;outer<n;outer++)

{

for(inner=key;inner<n-1;inner++)//4 5 6 7

{

if(arr[inner]<arr[inner+1])

{

temp=arr[inner];

arr[inner]=arr[inner+1];

arr[inner+1]=temp;

}

}

}

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

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

return 0;

}

1. PROGRAM TO PRINT THE GIVEN NUMBER PATTERN  n=5

1                                                      2  4                                                          3  6  9                                                      4  8  12 16                                              5  10 15 20 25

#include<stdio.h>

int main()

{

int num,row,col;

scanf("%d",&num);

for(row=1;row<=num;row++,printf("\n"))

{

for(col=1;col<=row;col++)

{

printf("%d ",row\*col);

}

}

return 0;

}