PF LAB:7

24K-0514

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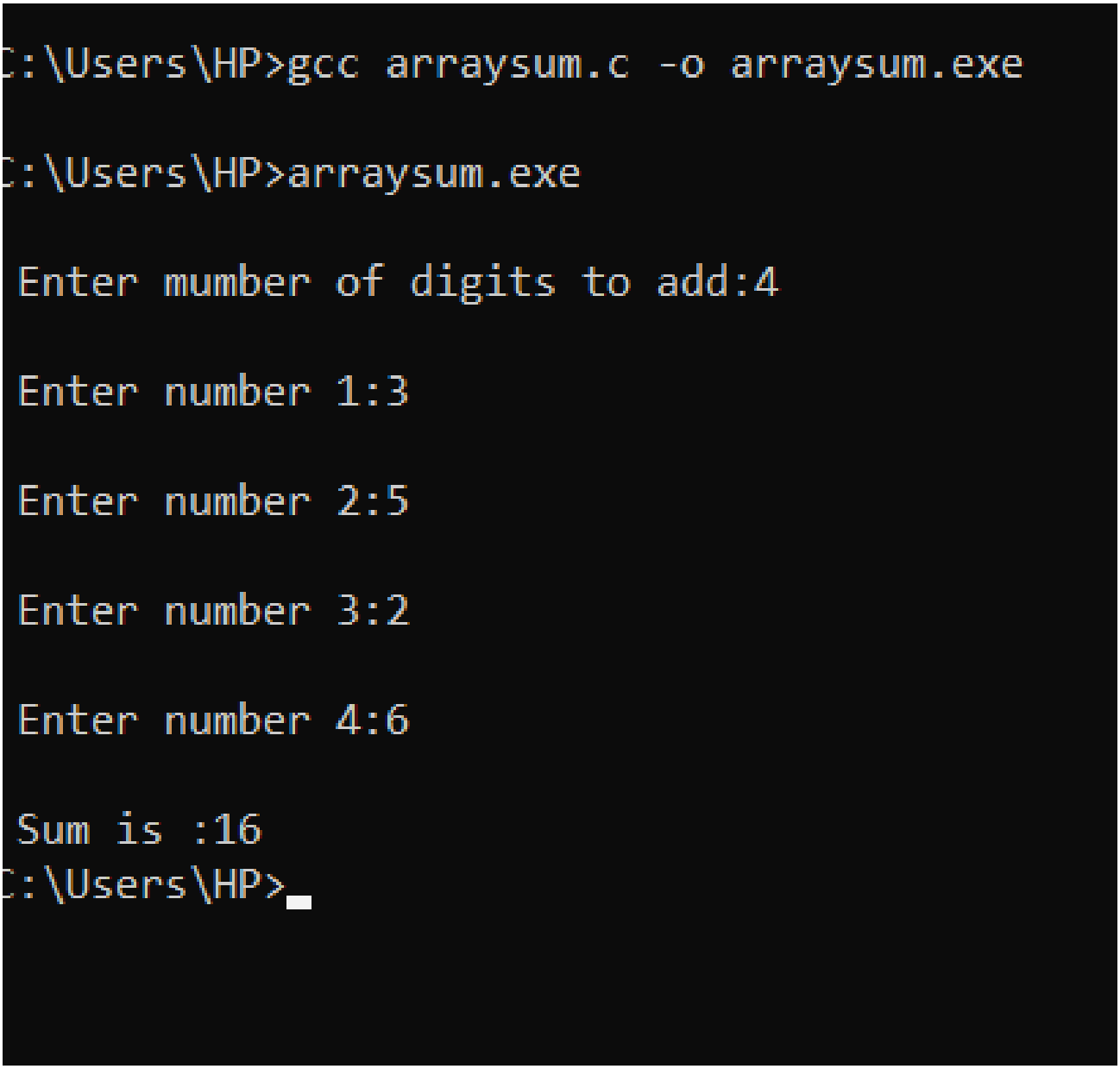
QUESTION 1:

Write a C Program that takes an user input array and prints the sum of its elements.

C: > Users > HP > C arraysum.c > main()

```c
#include <stdio.h>

int main() {
    int array[100],i,n,sum=0;

    printf("\n Enter mumber of digits to add:");
    scanf("%d",&n);

    for( i=0;i<n;i++)
    {
        printf("\n Enter number %d:",i+1);
        scanf("%d",&array[i]);
        sum=sum+array[i];
    }
    printf("\n Sum is :%d",sum);
    return 0;
    }

```

OUTPUT:

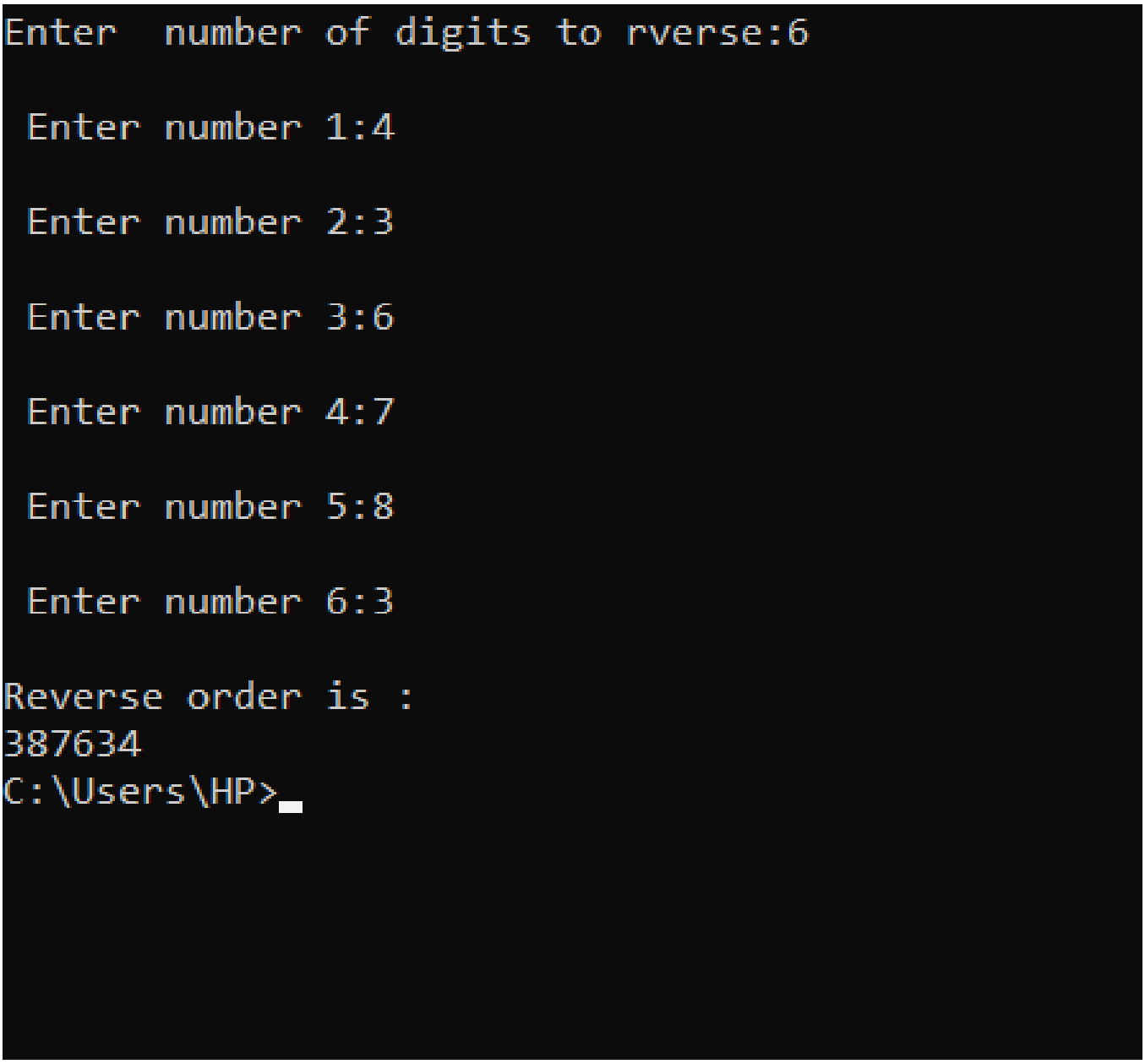

C:\Users\HP>gcc arraysum.c -o arraysum.exe
C:\Users\HP>arraysum.exe
Enter mumber of digits to add:4
Enter number 1:3
Enter number 2:5
Enter number 3:2
Enter number 4:6
Sum is :16
C:\Users\HP>

QUESTION 2:

Write a program in C to read n number of values in an array and display it in reverse order.

```c
#include<stdio.h>
int main()
{
    int array[100],reverse[100]={0};
    int n,i;
    printf("Enter  number of digits to rverse:");
    scanf("%d",&n);
    for( i=0;i<n;i++)
    {
    printf("\n Enter number %d:",i+1);
    scanf("%d",&array[i]);
    }
    printf("\nReverse order is :\n");
     for( i=n-1;i>=0;i--)
    {
   reverse[i]=array[i];
    printf("%d",reverse[i]);
    }
    return 0;
}
```

OUTPUT:

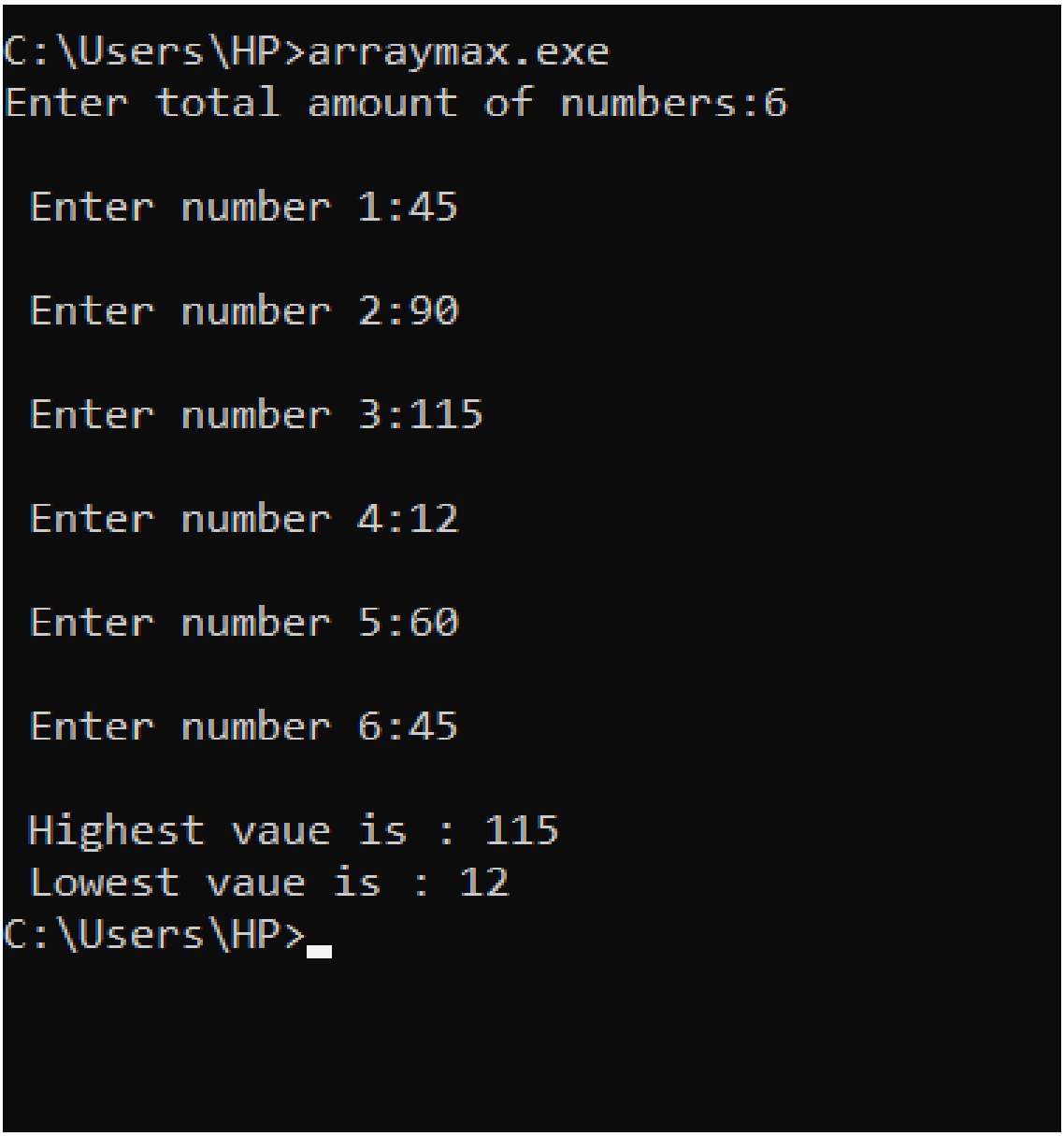

Enter number of digits to rverse:6
Enter number 1:4
Enter number 2:3
Enter number 3:6
Enter number 4:7
Enter number 5:8
Enter number 6:3
Reverse order is :
387634
C:\Users\HP>

QUESTION 3:

Write a C Program to find the minimum and maximum number in an array.

```c
#include<stdio.h>
int main()
{
    int array[100],high=0,low=10000;
    int n,i;
    printf("Enter total amount of numbers:");
    scanf("%d",&n);
    for( i=0;i<n;i++)
    {
    printf("\n Enter number %d:",i+1);
    scanf("%d",&array[i]);
    if(array[i]>high)
    {
        high=array[i];

    }

    if(array[i]<low)
    {
       low=array[i];
    }
    }
     printf("\n Highest vaue is : %d",high);
    printf("\n Lowest vaue is : %d",low);

    return 0;
}
```

OUTPUT:

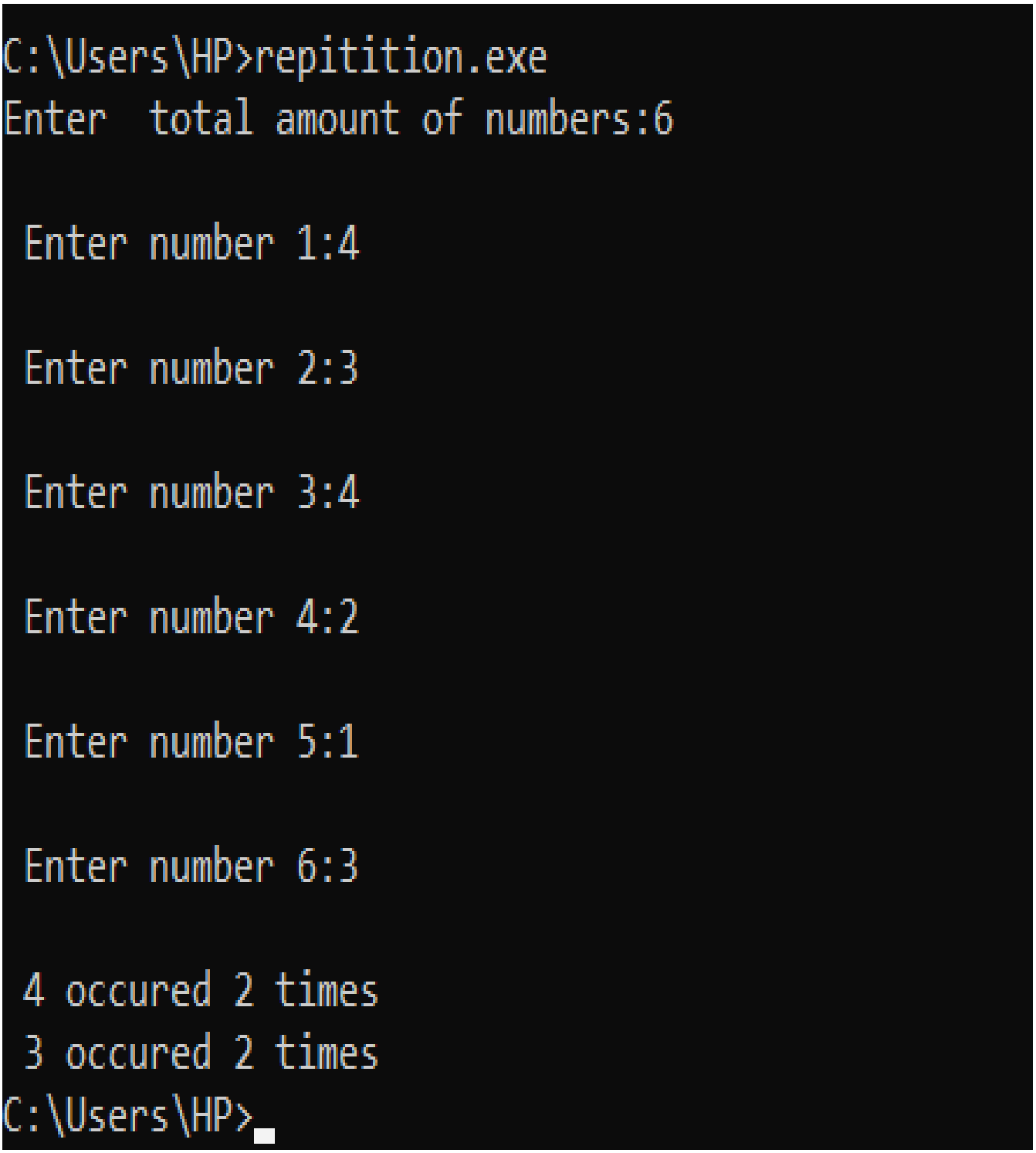

C:\Users\HP>arraymax.exe
Enter total amount of numbers:6
Enter number 1:45
Enter number 2:90
Enter number 3:115
Enter number 4:12
Enter number 5:60
Enter number 6:45
Highest vaue is : 115
Lowest vaue is : 12
C:\Users\HP>

QUESTION 4:

Given an array arr[] of size N which contains elements from 0 to N-1, you need to find all the elements occurring more than once in the given array.

```c
#include<stdio.h>
int main()
{
    int array[10000],count[10000]={0};
    int n,flag=0;
    printf("Enter  total amount of numbers:");
    scanf("%d",&n);
    for( int i=0;i<n;i++)
    {
    printf("\n Enter number %d:",i+1);
    scanf("%d",&array[i]);
    count[array[i]]+=1;
    }
     for(int  i=0;i<n;i++)
    {
        if(count[array[i]]>1)
    {
printf("\n %d occured %d times",array[i],count[array[i]]);
count[array[i]]=0;
flag++;
    }
    }
    if(flag<1)
    {
        printf("\n No digit repeated");
    }
     return 0;
}
```

OUTPUT:


C:\Users\HP>repitition.exe
Enter total amount of numbers:6
Enter number 1:4
Enter number 2:3
Enter number 3:4
Enter number 4:2
Enter number 5:1
Enter number 6:3
4 occured 2 times
3 occured 2 times
C:\Users\HP>