folder > gcd.c > hcf(int, int)

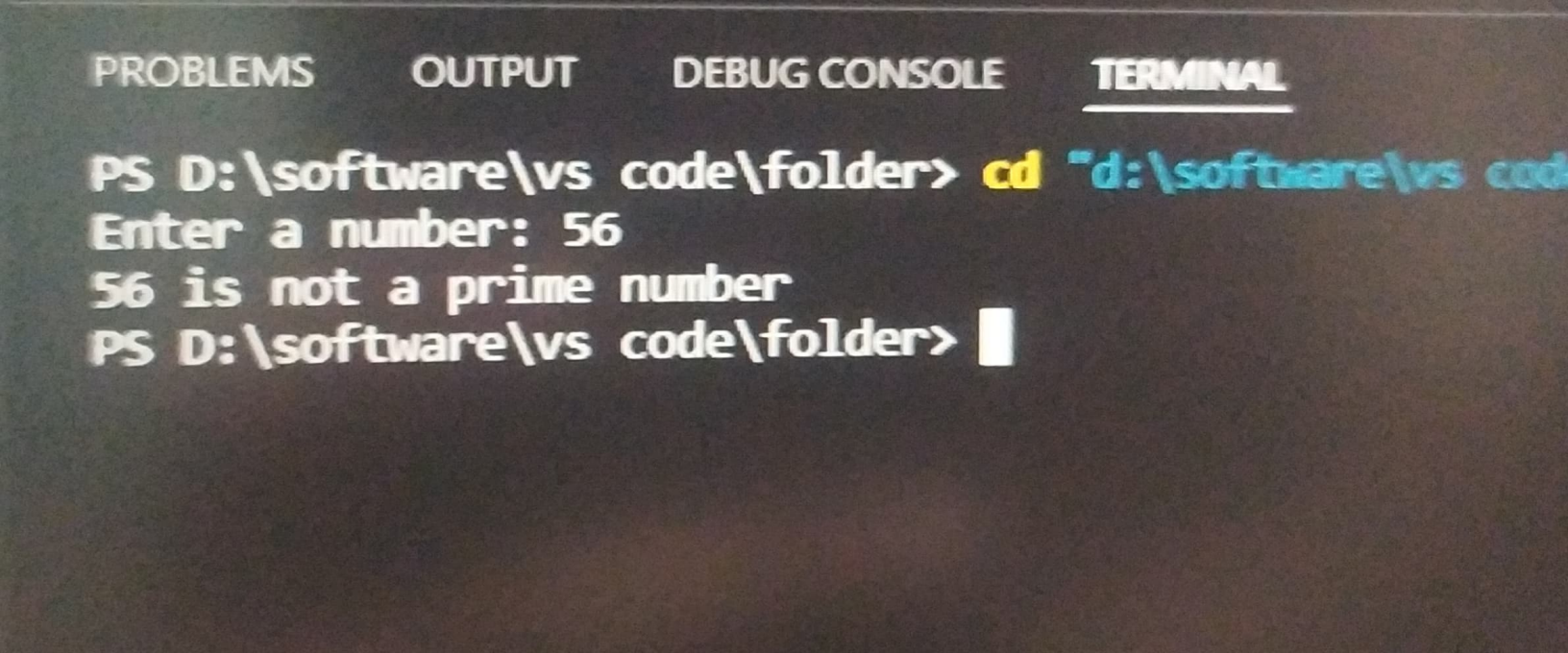
```c
#include <stdio.h>
int hcf(int n1, int n2);
int main() {
    int n1, n2;
    printf("Enter two positive integers= ");
    scanf("%d %d", &n1, &n2);
    printf("G.C.D of %d and %d is %d.", n1, n2, hcf(n1, n2));
    return 0;
}

int hcf(int n1, int n2) {
    if (n2 != 0)
        return hcf(n2, n1 % n2);
    else
        return n1;
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS D:\software\vs code\folder> cd "d:\software\vs code\folder\" ; if ($?) { gcc gcd.c
Enter two positive integers= 45 23
G.C.D of 45 and 23 is 1.
PS D:\software\vs code\folder>
```

```c
#include <stdio.h>
int primeno(int, int);
int main()
{
    int num, check;
    printf("Enter a number: ");
    scanf("%d", &num);
    check = primeno(num, num / 2);
    if (check == 1)
    {
        printf("%d is a prime number\n", num);
    }
    else
    {
        printf("%d is not a prime number\n", num);
    }
    return 0;
}
int primeno(int num, int i)
{
    if (i == 1)
    {
        return 1;
    }
    else
    {
        if (num % i == 0)
        {
            return 0;
        }
        else
        {
            return primeno(num, i - 1);
        }
    }
}
```


PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PS D:\software\vs code\folder> cd "d:\software\vs cod
Enter a number: 56
56 is not a prime number
PS D:\software\vs code\folder>

```c
#include <stdio.h>
int isEven(int num)
{
    return !(num & 1);
}
int main()
{
    int num;
    printf("Enter any number: ");
    scanf("%d", &num);
    if(isEven(num))
    {
        printf("The number is even.");
    }
    else
    {
        printf("The number is odd.");
    }
    return 0;
}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS D:\software\vs code\folder> cd "d:\software\vs code\folder\" ; if
Enter any number: 56
The number is even.
PS D:\software\vs code\folder>
```

folder > C swap.c > main()

```c
#include<stdio.h>
void swap(int *,int *);
int main()
{
    int n1,n2;
    printf("Input 1st number : ");
    scanf("%d",&n1);
    printf("Input 2nd number : ");
    scanf("%d",&n2);
    printf("Before swapping: n1 = %d, n2 = %d ",n1,n2);
    swap(&n1,&n2);
    printf("\nAfter swapping: n1 = %d, n2 = %d \n\n",n1,n2);
    return 0;
}
void swap(int *p,int *q)
{
    int tmp;
    tmp = *p;
    *p=*q;
    *q=tmp;
}
```

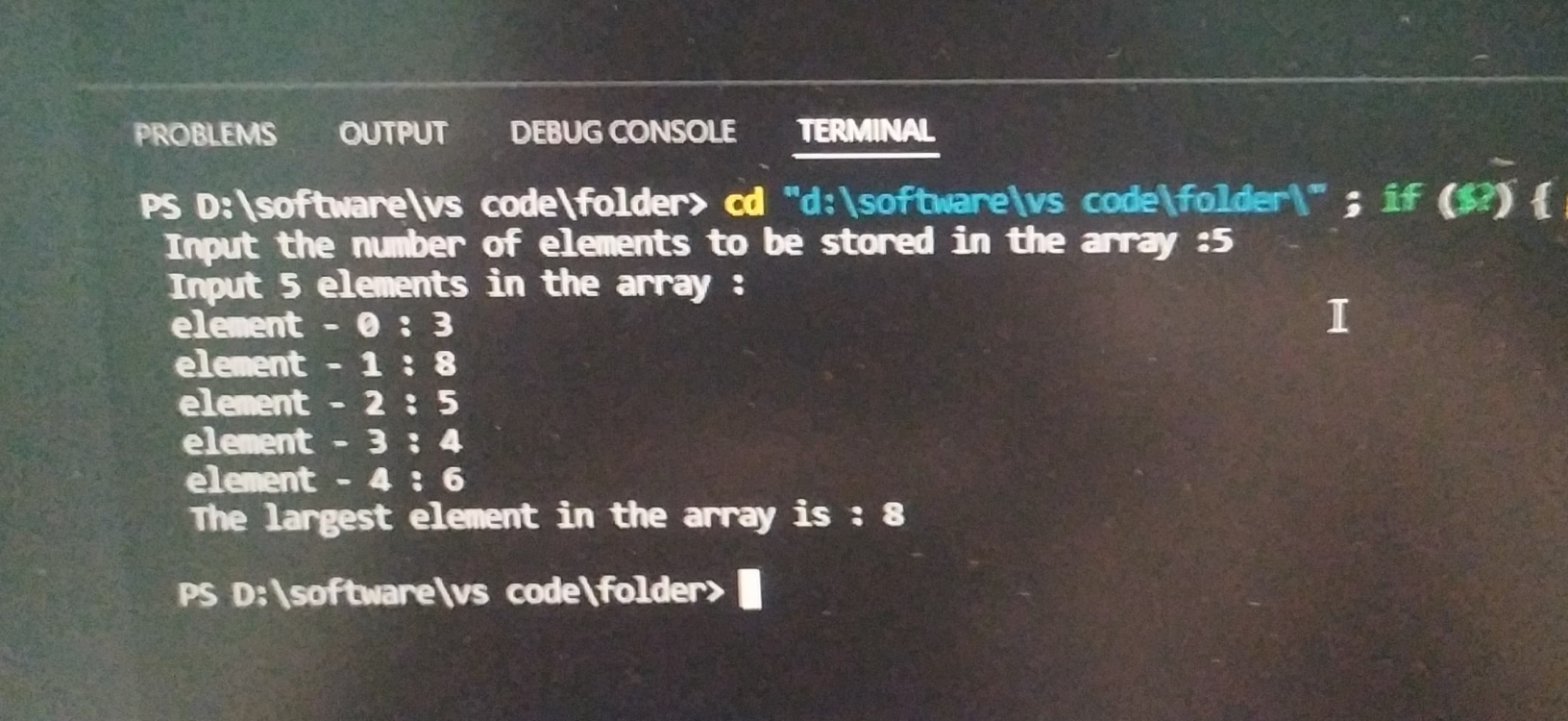
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS D:\software\vs code\folder> cd "d:\software\vs code\folder\" ; if ($?) { gcc sw
Input 1st number : 45
Input 2nd number : 23
Before swapping: n1 = 45, n2 = 23
After swapping: n1 = 23, n2 = 45

PS D:\software\vs code\folder>
```

folder > C lagelement.c > findMaxElem(int [])

```c
#include<stdio.h>
#define MAX 100
int findMaxElem(int []);
int n;
int main()
{
    int arr1[MAX],mxelem,i;
       printf(" Input the number of elements to be stored in the array :");
       scanf("%d",&n);
       printf(" Input %d elements in the array :\n",n);
       for(i=0;i<n;i++)
        {
          printf(" element - %d : ",i);
          scanf("%d",&arr1[i]);
        }
    mxelem=findMaxElem(arr1);
    printf(" The largest element in the array is : %d\n\n",mxelem);
    return 0;
}
int findMaxElem(int arr1[])
{
    int i=1,mxelem;
    mxelem=arr1[0];
    while(i<n)
    {
      if(mxelem<arr1[i])
            mxelem=arr1[i];
      i++;
    }
    return mxelem;
}
```


PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PS D:\software\vs code\folder> cd "d:\software\vs code\folder\" ; if ($?) {
Input the number of elements to be stored in the array :5
Input 5 elements in the array :
element - 0 : 3
element - 1 : 8
element - 2 : 5
element - 3 : 4
element - 4 : 6
The largest element in the array is : 8
PS D:\software\vs code\folder>