ASSIGNMENT

BY
RITIKA SHARMA
ROLLNO :-   2023A7R002
SEMESTER 1
COMPUTER SCIENCE AND ENGINEERING (CYBER SECURITY)

Model Institute of Engineering & Technology (Autonomous)

(Permanently Affiliated to the University of Jammu, Accredited by NAAC with "A" Grade)
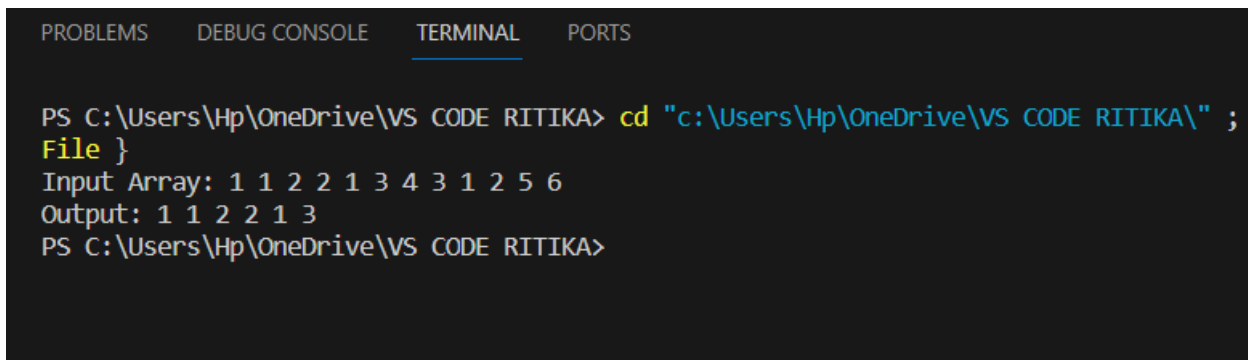
Jammu, India

2023

Q 1. Write the program for finding duplicate elements in an array.
Eg: Input Array: 1 1 2 2 1 3 4 3 1 2 5 6 Output:1 2 3

```c
// Print duplicate elements in an  array
#include <stdio.h>
void duplicate(int arr[], int size)
{
    printf("Output: ");
    for (int i = 0; i < size; i++)
    {
        for (int j=i+1;j<size;j++)
        {
            if (arr[i]==arr[j])
            {
            printf("%d ",arr[i]);
            break;
            }
        }
    }
}
int main()
{
    int arr[]={1,1,2,2,1,3,4,3,1,2,5,6};
    int size=sizeof(arr)/sizeof(arr[0]);
    printf("Input Array: ");
    for (int i=0;i<size;i++)
    {
        printf("%d ",arr[i]);
    }
    printf("\n");
    duplicate(arr,size);
    return 0;
}
```

```
PROBLEMS    DEBUG CONSOLE    TERMINAL    PORTS

PS C:\Users\Hp\OneDrive\VS CODE RITIKA> cd "c:\Users\Hp\OneDrive\VS CODE RITIKA\" ;
File }
Input Array: 1 1 2 2 1 3 4 3 1 2 5 6
Output: 1 1 2 2 1 3
PS C:\Users\Hp\OneDrive\VS CODE RITIKA>
```
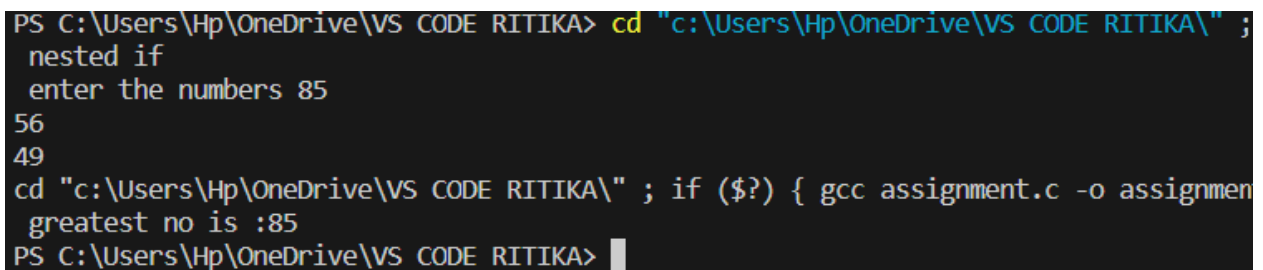
2. Model Institute Of Engineering and Technology (Autonomous) , Jammu

Q 2. Write the program for finding the largest of three numbers in all the methods.
(using ternary, elseif, nested if)

// nested if

```c
#include <stdio.h>
void main ()
{
    int a,b,c;
    printf(" nested if \n");
    printf(" enter the numbers ");
    scanf(" %d %d %d ",&a,&b,&c);
    if (a>b)
    { if (a>c){
    printf(" greatest no is :%d ",a ); }
    }
    else
    {printf(" condition false ");
    }
}
```
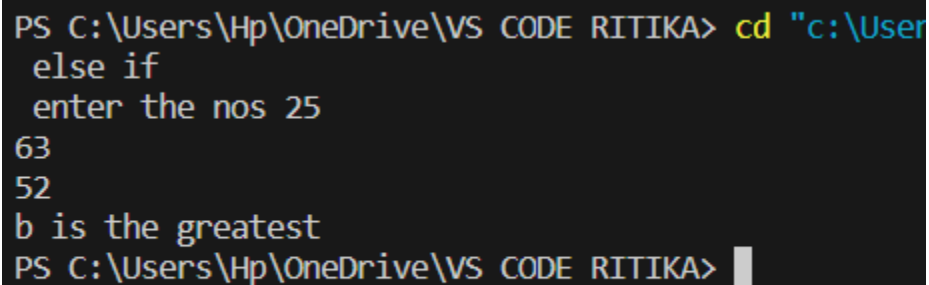
```
PS C:\Users\Hp\OneDrive\VS CODE RITIKA> cd "c:\Users\Hp\OneDrive\VS CODE RITIKA\" ;
 nested if
 enter the numbers 85
56
49
cd "c:\Users\Hp\OneDrive\VS CODE RITIKA\" ; if ($?) { gcc assignment.c -o assignmen
 greatest no is :85
PS C:\Users\Hp\OneDrive\VS CODE RITIKA> █
```
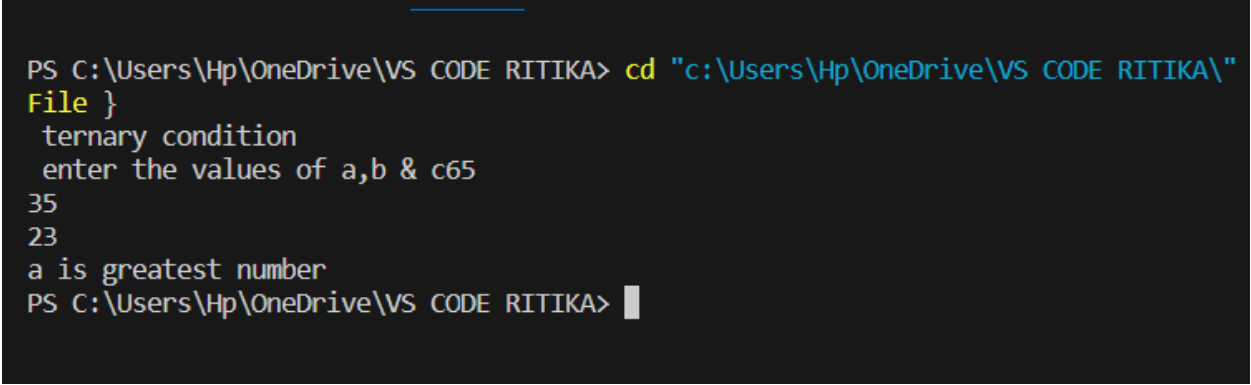
```c
// else if
#include <stdio.h>
void main (){
  int a,b,c ;
   printf(" else if\n");
  printf(" enter the nos ");
 scanf(" %d %d %d", &a,&b,&c);
 if (a>b && a>c)
 {

  printf(" a is greatest ",a);
    }
    else if(b>c && b>a)
    {
   printf("b is the greatest",b);
    }
    else
    {
      printf(" c is the greatest",c);
    }
}
```

```
PS C:\Users\Hp\OneDrive\VS CODE RITIKA> cd "c:\User
 else if
 enter the nos 25
63
52
b is the greatest
PS C:\Users\Hp\OneDrive\VS CODE RITIKA>
```

```c
// ternary
#include <stdio.h>
void main()
{
    int a,b,c;
    printf(" ternary condition\n");
    printf(" enter the values of a,b & c");
    scanf("%d %d %d",&a,&b,&c);
    //ternary operator
(a>b)&&(a>c)?printf("a is greatest number"):printf(" condition failed");
}
```

```
PS C:\Users\Hp\OneDrive\VS CODE RITIKA> cd "c:\Users\Hp\OneDrive\VS CODE RITIKA\"
File }
 ternary condition
 enter the values of a,b & c65
35
23
a is greatest number
PS C:\Users\Hp\OneDrive\VS CODE RITIKA>
```