

ASSIGNMENT

By

DHEERAJ SHARMA

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Semester – 1st

CSE



Model Institute of Engineering & Technology (Autonomous)

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

```
#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;
}
```

```
}
```

OUTPUT:

```
PS C:\Dheeraj Sharma> cd "c:\Dheeraj Sharma\c Programing\c program\" ; if ($?) { gcc duplicateelements.c -o duplicateelements } ; if ($?) { .\duplicateelements }
Input Array: 1 1 2 2 1 3 4 3 1 2 5 6
Output: 1 1 2 2 1 3
PS C:\Dheeraj Sharma\c Programing\c program>
```

2. Write the program for finding largest of three numbers in all methods.

(using ternary, elseif, nested if)

//Using Ternary Method:

```
#include<stdio.h>

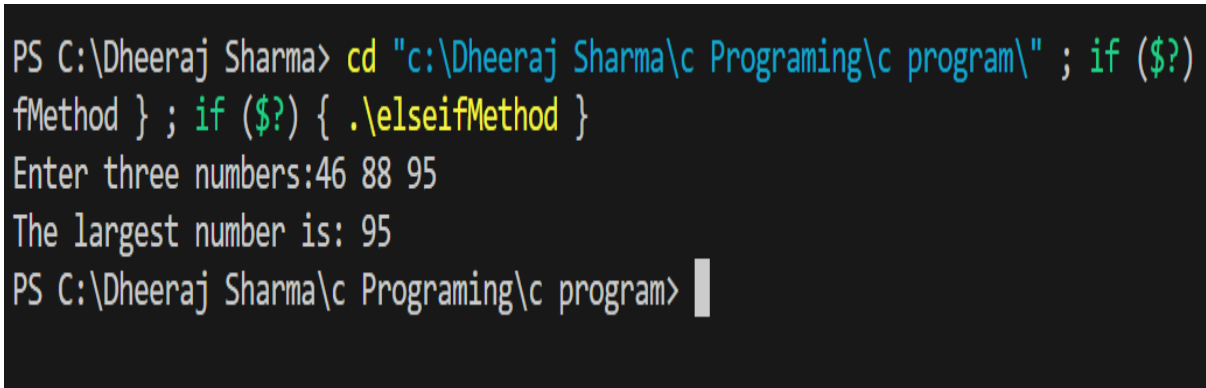
void main()
{
    int a,b,c,big ;
    printf("Enter three numbers:");
    scanf("%d %d %d", &a,&b,&c);
    big =a>b? (a>c? a:c) :(b>c?b:c);
    printf("The largest number is: %d\n",big);
}
```

OUTPUT:

```
PS C:\Dheeraj Sharma> cd "c:\Dheeraj Sharma\c Programing\c program\" ; if ($?) { gcc ternary Method.c -o ternaryMethod } ; if ($?) { .\ternaryMethod }
Enter three numbers:32 46 68
The largest number is: 68
PS C:\Dheeraj Sharma\c Programing\c program>
```

```
//Using elseif:
#include<stdio.h>
void main()
{
    int a,b,c;
    printf("Enter three numbers:");
    scanf("%d %d %d",&a,&b,&c);
    if (a>=b&&a>=c)
    {
        printf("The largest number is: %d\n",a);
    }
    else
    {
        if(b>=a&&b>=c)
        {
            printf("The largest number is: %d\n",b);
        }
        else
        {
            printf("The largest number is: %d\n",c);
        }
    }
}
```

OUTPUT:



```
PS C:\Dheeraj Sharma> cd "c:\Dheeraj Sharma\c Programing\c program\" ; if ($?) {
fMethod } ; if ($?) { .\elseifMethod }
Enter three numbers:46 88 95
The largest number is: 95
PS C:\Dheeraj Sharma\c Programing\c program>
```

```
//Using Nested If:
#include<stdio.h>
void main()
{
    int a,b,c;
    printf("Enter three numbers:");
    scanf("%d %d %d",&a,&b,&c);
    if(a>=b)
    {
        if(a>=c)
        {
            printf("The largest number is: %d\n",a);
        }
        else
        {
            printf("The largest number is: %d\n",c);
        }
    }
    else
    {
        if(b>=c)
        {
            printf("The largest number is: %d\n",b);
        }
        else
        {
            printf("The largest number is: %d\n",c);
        }
    }
}
```

OUTPUT:

```
PS C:\Dheeraj Sharma> cd "c:\Dheeraj Sharma\c Programing\c program\" ; if ($?)  
{ ; if ($?) { .\Nestedif }  
Enter three numbers:54 78 34  
The largest number is: 78  
PS C:\Dheeraj Sharma\c Programing\c program> |
```