

Practice programs for OOI lab-Week-2(C programs)

3)

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
    int i,j,n,k=1;
    printf("Enter no. of rows:");
    scanf("%d",&n);
    for(i=1;i<=n;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%d\t",k);
            k++;
        }
        printf("\n");
    }
}
```

```
C:\Users\llok\l\Desktop\pp.c\bin\Debug\pp.c.exe
Enter no. of rows:4
1
2      3
4      5      6
7      8      9      10

Process returned 0 (0x0)   execution time : 2.491 s
Press any key to continue.
```

Practice programs for OOI lab-Week-2(C programs)

4)

```
#include <stdio.h>
int main()
{
    int CIE,SEE;
    float tot;
    printf("Enter the CIE(50) and SEE(100) marks of the student respectively\n");
    scanf("%d%d",&CIE,&SEE);
    tot = (SEE/2.0) + CIE;
    if(CIE>=20 && SEE>=40)
    {
        if(tot>89 && tot<=100)
            printf("Grade: S");
        else if(tot>79 && tot<=89)
            printf("Grade: A");
        else if(tot>69 && tot<=79)
            printf("Grade: B");
        else if(tot>59 && tot<=69)
            printf("Grade: C");
        else if(tot>49 && tot<=59)
            printf("Grade: D");
        else
            printf("Grade: E");
    }
    else if(CIE>=20 && SEE<40)
        printf("Grade: F");
    else
        printf("Not eligible, grade not applicable");
    return 0;
}
```

```
Enter the CIE(50) and SEE(100) marks of the student respectively
45
90
Grade: S
Process returned 0 (0x0)   execution time : 11.423 s
Press any key to continue.
```

```
Enter the CIE(50) and SEE(100) marks of the student respectively
27
50
Grade: D
Process returned 0 (0x0)   execution time : 12.440 s
Press any key to continue.
```


Practice programs for OOI lab-Week-2(C programs)

5)

```
#include <stdio.h>
int main()
{
    int i,low,high,flag;
    printf("Enter 2 numbers:");
    scanf("%d %d",&low,&high);
    printf("Prime numbers between %d and %d are(inclusive):\n",low,high);
    while(low<=high)
    {
        if(low<=1)
        {
            low++;
            continue;
        }
        flag = 0;
        for(i=2;i<=low/2;i++)
        {
            if(low%i==0)
            {
                flag=1;
                break;
            }
        }
        if(flag==0)

            printf("%d\n",low);

        low++;
    }
}
```

 C:\Users\llok\m\Desktop\ff.c\bin\Debug\ff.c.exe

```
Enter 2 numbers:5 20
Prime numbers between 5 and 20 are(inclusive):
5
7
11
13
17
19
```

Practice programs for OOI lab-Week-2(C programs)

6)

```
#include <stdio.h>
#include <math.h>
#include <stdlib.h>
int main() {
    float a,v,r,h;
    while(1==1)
    {
        int c;
        printf("Enter the choice of shape:\n");
        printf("1.Cylinder\n2.Cone\n3.Sphere\n0.Exit\n");
        scanf("%d",&c);
        switch(c)
        {
            case 1:printf("Enter radius:\n");
                scanf("%f",&r);
                printf("Enter height:\n");
                scanf("%f",&h);
                a=(2*3.14*r*h)+(2*3.14*r*r);
                v=(3.14*r*r*h);
                printf("Area: %f\nVolume: %f\n",a,v);
                break;
            case 2:printf("Enter radius:\n");
                scanf("%f",&r);
                printf("Enter height:\n");
                scanf("%f",&h);
                a=(3.14*r)*(r+sqrt((h*h)+(r*r)));
                v=(3.14*r*r*h)/3.0;
                printf("Area: %f\nVolume: %f\n",a,v);
                break;
            case 3:printf("Enter radius:\n");
                scanf("%f",&r);
                a=4*3.14*r*r;
                v=(4*3.14*r*r*r)/3.0;
                printf("Area: %f\nVolume: %f\n",a,v);
                break;
            case 0:printf("Exit\n");
                exit(0);
            default:printf("Invalid choice\n");
        }
    }
    return 0;
}
```

Practice programs for OOI lab-Week-2(C programs)

C:\Users\llok\l\Desktop\fguzu.c\bin\Debug\fguzu.c.exe

Enter the choice of shape:

1.Cylinder
2.Cone
3.Sphere
0.Exit

1

Enter radius:

5

Enter height:

5

Area: 314.000000

Volume: 392.500000

Enter the choice of shape:

1.Cylinder
2.Cone
3.Sphere
0.Exit

2

Enter radius:

10

Enter height:

12

Area: 804.483704

Volume: 1256.000000

Enter the choice of shape:

1.Cylinder
2.Cone
3.Sphere
0.Exit

3

Enter radius:

7

Area: 615.440002

Volume: 1436.026611

Enter the choice of shape:

1.Cylinder
2.Cone
3.Sphere
0.Exit

0

Exit

Process returned 0 (0x0) execution time : 39.408 s