```c
#include<stdio.h>
void main()
{
    int rows,i,j,no=1;
    printf("Enter number of rows");
    scanf("%d",&rows);
    for(i=1;i<=rows;i++)
    {
        for(j=1;j<=i;j++)
        {
            printf("%d ",no);
            no++;
        }
        printf("\n");
    }
}
```

```
input
Enter number of rows6
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
16 17 18 19 20 21


...Program finished with exit code 6
Press ENTER to exit console.
```

```c
#include<stdio.h>
void main()
{
    float c,s,total;
    printf("Enter CIE marks out of 50");
    scanf("%f",&c);
    printf("Enter SEE marks out of 100");
    scanf("%f",&s);
    total=c+(s/2);
    if(total>=90)
     printf("S Grade");
    else if(total>=80)
     printf("A Grade");
    else if(total>=70)
     printf("B Grade");
    else if(total>=60)
     printf("C Grade");
    else if(total>=50)
     printf("D Grade");
    else if(total>=40)
     printf("E Grade");
    else
     printf("F Grade");
}
```

```
Enter CIE marks out of 50 45.5
Enter SEE marks out of 100 90.5
S Grade

...Program finished with exit code 7
Press ENTER to exit console.
```

```c
#include<stdio.h>
 #include<math.h>
void main()
{
    int ch;
    float r,h,v,a;
    while(ch!=4)
    {
        printf("Enter your choice:\n 1.Cylinder\n 2.Cone\n 3.Sphere\n 4.Exit\n");
        scanf("%d",&ch);
        switch(ch)
        {
            case 1:
            printf("Enter the radius and height of the cylinder\n");
            scanf("%f%f",&r,&h);
            a=(2*3.14*r*h)+(2*3.14*pow(r,2));
            v=3.14*pow(r,2)*h;
            printf("Area of cylinder: %.3f\nVolume of cylinder: %.3f\n",a,v);
            break;
             case 2:
            printf("Enter the radius and height of the cone\n");
            scanf("%f%f",&r,&h);
            a=3.14*r*(r+sqrt(pow(h,2)+pow(r,2)));
            v=(3.14*r*r*h)/3;
            printf("Area of cone: %.3f\nVolume of cone: %.3f\n",a,v);
            break;
             case 3:
            printf("Enter the radius of the sphere\n");
            scanf("%f",&r);
            a=4*3.14*r*r;
```

```c
     case 1:
     printf("Enter the radius and height of the cylinder\n");
     scanf("%f%f",&r,&h);
     a=(2*3.14*r*h)+(2*3.14*pow(r,2));
     v=3.14*pow(r,2)*h;
     printf("Area of cylinder: %.3f\nVolume of cylinder: %.3f\n",a,v);
     break;
      case 2:
     printf("Enter the radius and height of the cone\n");
     scanf("%f%f",&r,&h);
     a=3.14*r*(r+sqrt(pow(h,2)+pow(r,2)));
     v=(3.14*r*r*h)/3;
     printf("Area of cone: %.3f\nVolume of cone: %.3f\n",a,v);
     break;
      case 3:
     printf("Enter the radius of the sphere\n");
     scanf("%f",&r);
     a=4*3.14*r*r;
     v=(4/3)*3.14*pow(r,3);
     printf("Area of cone: %.3f\nVolume of cone: %.3f\n",a,v);
     break;
     case 4:
     break;
     default:
     break;
    }
  }
}
```

```
Enter your choice:
 1.Cylinder
 2.Cone
 3.Sphere
 4.Exit
2
Enter the radius and height of the cone
15.5
30.0
Area of cone: 2397.854
Volume of cone: 7543.850
Enter your choice:
 1.Cylinder
 2.Cone
 3.Sphere
 4.Exit
4


...Program finished with exit code 4
Press ENTER to exit console.
```

```c
#include<stdio.h>
void main()
{
    int n1,n2;
    printf("Enter the first number ");
    scanf("%d",&n1);
    printf("Enter the second number ");
    scanf("%d",&n2);
    printf("The prime numbers are: ");
    for(int i=n1;i<=n2;i++)
    {
        int c=0;
        for(int j=1;j<=i;j++)
        {
            if(i%j==0)
            {
                c++;
            }
        }
        if(c==2)
        printf("%d ",i);

    }
}
```

```
Enter the first number 1
Enter the second number 20
The prime numbers are: 2 3 5 7 11 13 17 19

...Program finished with exit code 20
Press ENTER to exit console.
```