

```
#include <stdio.h>
int main()
{
    int i, j, count=1, n;
    printf("\n Enter the value of n: ");
    scanf("%d", &n);
    for(i=1; i<=n; i++)
    {
        printf("\n");
        for(j=1; j<=i; j++)
            printf("%d ", count++);
    }
    return 0;
}
```

```
4 #include <stdio.h>
int main()
{
    int m1, m2, m3, total = 0;
    printf("\n Enter the marks obtained in
    CIE (out of 50): ");
    scanf("%d", &m1);
    printf("\n Enter the marks obtained in
    SEE (out of 100): ");
    scanf("%d", &m2);
    m3 = m2 / 2;
    total = m1 + m3;
    if (total >= 90)
    {
        printf("\n S grade");
    }
    else if (total >= 80)
    {
        printf("\n A grade");
    }
    else if (total >= 70)
    {
        printf("\n B grade");
    }
}
```


else if (total >= 60)

{

printf("\n C grade");

}

else if (total >= 50)

{

printf("\n D grade");

}

else if (total >= 40)

{

printf("\n E grade");

}

else

{

printf("\n FAIL");

}

return 0;

}

```
5. #include <stdio.h>
void main()
{
    int num1, num2, num, i, c;
    printf("In Enter the starting number of
    range: ");
    scanf("%d", &num1);
    printf("In Enter the ending number of
    range: ");
    scanf("%d", &num2);
    printf("In The prime numbers between %d
    and %d are: ", num1, num2);
    for(num = num1; num <= num2; num++)
    {
        c = 0;
        for(i = 2; i <= num/2; i++)
        {
            if(num % i == 0)
            {
                c++;
                break;
            }
        }
    }
}
```

```
if (c == 0 && num != 1)
```

```
printf ("%d", num);
```

```
{
```

```
printf ("\n");
```

```
}
```



```

6. #include <stdio.h>
#include <math.h>
int main()
{
    int choice;
    const float pi = 3.14;
    float area, volume;
    int r1, r2, r3;
    int h1, h2;
    char ch;
    do
    {
        printf("\n select your choice from options  
given below: ");
        printf("1. cylinder\n 2. cone\n 3. sphere\n");
        scanf("%d", &choice);
        printf("\n Enter the radius: ");
        scanf("%d", &r1);
        printf("\n Enter the height: ");
        scanf("%d", &h1);
        switch (choice)
        {

```

case 1:

```
printf("For cylinder: \n");
```

```
area = ((2 * pi * r1 * h1) + (2 * pi * r1 * r1));
```

```
Volume = (pi * r1 * r1 * h1);
```

```
printf("Area of cylinder = %.f \n", area);
```

```
printf("Volume of cylinder = %.f \n", volume);
```

```
break;
```

case 2:

```
printf("For cone: \n");
```

```
area = ((pi * r1 * (r1 + (sqrt(h1 * h2) + (r1 * r1)))));
```

```
Volume = (pi * r1 * r1 * h1) / 3;
```

```
printf("Area of cone = %.f \n", area);
```

```
printf("Volume of cone = %.f \n", volume);
```

```
break;
```

case 3:

```
printf("For sphere: \n");
```

```
area = 4 * pi * r1 * r1 * r1;
```

```
Volume = ((4/3) * pi * r1 * r1 * r1);
```

```
printf("Area of sphere = %.f \n", area);
```

```
printf("Volume of sphere = %.f \n", volume);
```

```
break;
```

default:

```
printf ("Please input correct choice: \n");  
break;
```

```
}
```

```
printf ("To continue press y: \n");  
scanf ("%s", &ch);
```

```
}
```

```
while (ch == 'y' || ch == 'Y');
```

```
}
```