1)

```python
n=int(input("Enter the number of rows: "))
k=1
for i in range(1,n+1):
    for j in range(1,i+1):
        print(k, end=' ')
        k=k+1;
    print()
```

```
Enter the number of rows: 5
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
```

2)

```python
n=int(input("Enter the number: "))
if n%6==0:
    print("Divisible by 6")
else:
    print("Not Divisible by 6")
```

```
Enter the number: 12
Divisible by 6
```

3)

```python
n=int(input("Enter the number: "))
for i in range(1,11):
    print(i,'*',n,'=',i*n)
```

```
Enter the number: 5
1 * 5 = 5
2 * 5 = 10
3 * 5 = 15
4 * 5 = 20
5 * 5 = 25
6 * 5 = 30
7 * 5 = 35
8 * 5 = 40
9 * 5 = 45
10 * 5 = 50
```

4)

```python
n=int(input("Enter the number: "))

count=0

while(n>0):

    r=n%10

    if r%2==0:

        count=count+1

    n=n//10

print(count)
```

```
Enter the number: 456
2
```

5)

```python
n=int(input("Enter the number: "))

t=n

count=0

while(n>0):

    r=n%10

    count=count+1
```

```
   n=n//10

rev=0

while(t>0):

   r=t%10

   count=count-1

   rev=rev+r*(10**count)

   t=t//10

print(rev)
```

```
Enter the number: 45678
87654
```

6)

```
n=int(input("Enter the number: "))

count=0

dec=0

while(n>0):

   r=n%10

   dec=dec+r*(2**count)

   count=count+1

   n=n//10

print(dec)
```

```
Enter the number: 1111
15
```

7)

```
n=int(input("Enter the number of rows: "))
```

```python
for i in range(1,n+1):
    if(i%2==1):
        for j in range(1,i+1):
            print(i*j, end=" ")
    else:
        for j in range(1,i+1):
            if(j%2==1):
                print("*", end=" ")
            else:
                print("+", end=" ")
    print()
```

```
Enter the number of rows: 7
1
* +
3 6 9
* + * +
5 10 15 20 25
* + * + * +
7 14 21 28 35 42 49
```

8)

```python
a,b,c=0,1,1
print(a,end=" ")
print(b,end=" ")
print(c,end=" ")
val=a+b+c
while(val<100):
    print(val,end=" ")
    a=b
```

```
    b=c

    c=val

    val=a+b+c
```

```
0 1 1 2 4 7 13 24 44 81
```

9)

```
n=int(input("Enter the number: "))

sum=0

while(n>0):

    r=n%10

    if r%2==1:

        sum+=r

    n=n//10

print(sum)
```

```
Enter the number: 345671
16
```

10)

```
n=int(input('Enter the value of n: '))

for i in range(n):

    print(i+1,end=' ')

    a,b,c,x =2,3,4,input('Enter expression: ')

    print('Evaluated as',eval(x)) if eval(x)%2==0 else print('Evaluated to odd number')
```

```
Enter the value of n: 2
1 Enter expression: 1+a+b+c
Evaluated as 10
2 Enter expression: a**2+b**2+c**a
Evaluated to odd number
```