1.write a program to print the number from 1 to 100

```
n=int(input("enter a number:"))
for i in range (1,n+1):
    print(i)
```

2. For multiples of three ,print 'fizz' instead of the number and for multiple of five ,print 'buzz

```
for i in range(1,100+1):
    if(i%3==0):
        print("fizz")
    elif(i%5==0):
    print("buzz")
    else:
        print(i)
```

3. For numbers which are multiples of both three and five ,print 'fizzbuzz"

```
for i in range (1,100+1):

if(i%3==0 and i%5==0):

print("fizzbuzz")

else:

print(i)
```

4.write a program that check if a number is prime

```
num =int(input("enter a number: "))
    if num==1:
    print("not a prime number")
    if num>1:
    for n in range(2,num):
        if num%2==0:
        print(num, "is not a prime number ")
```

```
break
else:
    print(num, "num is a prime number")
```

5.write a program to check if a string is a palindrome.

```
n="madam"
  rev=""
  temp=n
  for i in n:
    rev=i+rev
    if temp==rev:
       print("palindrome")
    else:
       print("not palindrome")
```

6.write a program that generates a random number between 1 and 100and ask the user to guess it . the program should give hints('too low and too high) until the user guesses correctly

```
n = int(input("Enter the guessing game: "))
    guess = None

print("selecte the guess in number between 1 to 100")
    while guess != n:
    guess = int(input("Guess a number:"))
        if guess<1 and guess>100:
        print(" guess a number between 1 and 100.")
        elif guess > n:
            print("Too high!")
        elif guess < n:
            print("Too low!")
        else:
            print("Correct!")</pre>
```

7.write a program that takes a number as input and print the sum of its digits

```
n=int(input("enter a number:"))
  digits = 0
    digit_sum = 0
    temp = n
    while temp > 0:
    digit = temp % 10
    digit_sum += digit
        digits += 1
        temp //= 10
        print(digits)
    print(digit_sum)
```

8.write a program to calculate the factorial of a number using a for loop

9.write a program to find the largest of three number using if statement

```
n1=int(input("enter a number:"))

n2=int(input("enter a number:"))

n3=int(input("enter a number:"))

if n1>n2 and n1>n3:

print("return n1")

elif(n2>n1 and n2>n3):

print("return n2")

else:

print(n3)
```

10.write a program to check if a number is an Armstrong number

11.write a program that prints the multiplications table for given number

```
n=int(input("enter a number:"))
for i in range(1,11):
    print(n,'x',i,'=',n*i)
```

12.write a program that counts the number of even and odd number in list

```
n = [22,55,77,99,100,11,33,55]
even_count = 0
even_number=[]
odd_count = 0
odd_number=[]
for i in n:
    if i % 2 == 0:
        even_number.append(i)
        even_count += 1
else:
```

```
odd_number.append(i)
  odd_count += 1
print(even_count)
print(even_number)
  print(odd_number)
print(odd_count)
```