**1.Write a program to find the largest of three numbers.**

**Code:**

input = 10,20,30  
print(max(input))

**2. Write a program to check if a number is positive, negative, or zero.**

**Code:**

n = int(input())  
  
if (n < 0):  
 print('number is negative')  
elif (n > 0):  
 print('number is positive')  
else:  
 print('number is 0')

**3. Write a program to check if a number is divisible by 5 and 11.**

**Code:**

num = int(input())  
if ((num%5 == 0) and (num%11 ==0)):  
 print('number is divisible by 5 and 11')   
else:  
 print('number is not divisible by 5 and 11')

**4. Write a program to count the number of vowels in a given string.**

**Code:**

s = input()  
  
counter = 0  
for i in s:  
 if ((i == 'a') or (i == 'o') or (i == 'e') or (i == 'i') or (i == 'u')):  
 counter += 1  
print(counter)

**5. Write a program to reverse a given number.**

**Code:**

s = 'mani'  
print(s[::-1])

s = 'mani'  
st = ""  
for i in range(len(s)):  
 st += s[len(s)-i-1]  
 print(st)

**6. Write a program to find the sum of digits of a number.**

**Code:**

number = 934752  
count = 0  
for i in str(number):  
 count += int(i)  
print(count)

**7. Write a program to check if a string is a palindrome.**

**Code:**

str = input()  
reverse\_str = str[::-1]  
if str == reverse\_str:  
 print('string is a palimdrome')  
else:  
 print('string is not a palimdrome')

**8. Write a program to find the factorial of a number using recursion.**

**Code:**

def factorial(n):

if n==1:

return 1

return n\*factorial(n-1)

num = 6

result = factorial(num)

print(result)

**9. Write a program to print all prime numbers in a given range.**

**Code:**

a = 10  
b = 20  
for i in range(a,b):  
 if i%2 == 0:  
 print(i)

**10. Write a program to calculate the area of a circle.**

**Code:**

import math  
r = 5  
print(math.pi\*r\*\*2)

**11. Write a program to count the number of words in a sentence.**

**Code:**

st = "hello gopinadh how are you"  
lent = st.split()  
length = len(lent)   
print(length)

**12.Butterfly pattern**

**Input: 5**

**Output:**

**\* \***

**\*\* \*\***

**\*\*\* \*\*\***

**\*\*\*\* \*\*\*\***

**\*\*\*\*\*\*\*\*\*\***

**\*\*\*\* \*\*\*\***

**\*\*\* \*\*\***

**\*\* \*\***

**\* \***

**Code:**

a = 5

for i in range(a+1):

print("\*"\*i+" "\*(a-i)+"\*"\*i)

for i in range(a):

print("\*"\*(a-i-1)+" "\*(i+1)+"\*"\*(a-i-1))

**13. Alphabet Pyramid**

Input: 5

Output:

A

ABA

ABCBA

ABCDCBA

ABCDEDCBA

**Code:**

a = int(input())

for i in range(a):

spaces = " " \* (a - i - 1)

alphabets = ""

right\_alphabets = “”

for j in range(i + 1):

if j == 0:

alphabets += chr(65 + j)

else:

alphabets += chr(65 + j)

right\_alphabets = chr(65 + j) + right\_alphabets

print(spaces + alphabets + right\_alphabets)

**14. Check if a Number is an Armstrong Number**

**Code:**

n = 153  
string\_format = str(n)  
length = len(string\_format)  
add = 0  
for i in string\_format:  
 add += int(i)\*\*3  
if add == n:  
 print('amstrong number')  
else:  
 print('not amstrong number')

**15. Count Occurrences of a Substring**

**Code:**

a = "ababcababc"  
b = "abc"  
number\_of\_ocuurances = a.count(b)  
print(number\_of\_ocuurances)

**16. print Hollow pattern**

**Code:**

a = 5  
 for i in range(5):  
 if i == 0:  
 print(" "\*(a)+"\*")  
 else:  
 print(" "\*(a-i)+"\*"+" "\*(i)+"\*")  
print(" "+" \*"\*(a))

**17.find the first uppercasenletter in the word.**

**Code:**

def uppercaseletter(a):  
 for i in a:  
 if i.isupper():  
 break  
 return i  
  
 a = "javaScript"  
 result = uppercaseletter(a)  
 print(result)

**18.removeing duplicates**

**Code:**

input = [10, 20, 30, 20, 10, 50, 60, 20, 10]  
removeing\_duplicates = set(input)  
print(removeing\_duplicates)

**19.to print the second largest number.**

**Code:**

list\_a = [10,30,20,50,40]  
list\_a.sort()  
print(list\_a[-2])

**20. count the ocuurances of substring.**

**Code:**

a = "ababcababc"  
 b = "abc"  
  
 number\_of\_ocuurances = a.count(b)  
 print(number\_of\_ocuurances)

**21.febbanacci series**

**Code:**

n = 10  
  
a,b = 0,1  
for i in range(n):  
 print(a)  
 a,b = b,a+b  
print(a)