Problem statements-

1.Write a python program to convert temperature from Fahrenheit to Celsius degrees.

f=int(input("enter the number"))  
c=5/9\*(f-32)  
print("the conversion of fahrenheit to degree celsius is:",c)

2.write a python program that reads a number in inches and converts it to meters.

n=int(input("enter the number"))  
print("the number in inches is:",n )  
meter=n/39.37  
meter=n\*0.0254  
print(" the number in meter is",meter)

enter the number30

the number in inches is: 30

the number in meter is 0.762

3.write a python program to convert minutes into years and days.

min=int(input("enter the minites to convert"))  
year=min/525600  
day=min/1440  
print("year are:",year)  
print("days are:",day)

enter the minites to convert5

year are: 9.512937595129377e-06

days are: 0.003472222222222222

4. Problem statement -

Enter username-

username = input("enter the username number")

Enter password –

password = int(input("enter your password"))

If username is swap and password is 1234

if username == "akanksha"and password == 1234:  
 print("login sucessfull")  
else:  
 print("fail")

Then login successfully otherwise failed

username = input("enter the username number")  
password = int(input("enter your password"))  
if username == "akanksha"and password == 1234:  
 print("login sucessfull")  
else:  
 print("fail")

5.Write a Python program to count the number of even and odd numbers in a series of numbers

l1=[1,2,5,3,7,8,912,23]  
even=0  
odd=0  
for i in l1:  
 if i%2==0:  
 even+=1  
 else:  
 odd+=1  
print("even number are:",even)  
print("odd number are :",odd)

6.Write a Python program to get the Fibonacci series between 0 and 50.

x=0  
y=1  
while y<50:  
 print(y)  
 x,y=y,x+y

or

def fib(n):  
 a=0  
 b=1  
 if n==1:  
 print(a)  
 else:  
 print(a)  
 print(b)  
 for i in range(2,n):  
 c=a+b  
 a=b  
 b=c  
 print(c,"\n")  
fib(50)

7.Write a Python program that checks whether a specified value is contained within a group of values.

a=["hii",1,2,3,4]  
i="hii"  
  
if i in a:  
 print("yes")  
else:  
 print("no")

8.Write a Python program that will accept the base and height of a triangle and compute its area.

base=int(input("enter the base"))  
height=int(input("enter the height"))  
Area=1/2\*base\*height  
print(Area)

\*\*\*\*class and object\*\*\*\*

class Area:  
 def A(self):  
 b=int(input("enter base"))  
 h=int(input("enter height"))  
 a=1/2\*(b\*h)  
 print(a)  
  
  
c=Area()  
c.A()

\*\*\*\*\*function\*\*\*\*\*

def area(b,h):  
 a=1/2\*(b\*h)  
 print(a)  
area(5,7)

9.Write down function to find out whether given no is even and odd?

def oddev(n):  
 if n%2==0:  
 print("number is even")  
 else:  
 print("number is odd")  
oddev(5)

10.Write down function to swap two values?

a=4  
b=5  
temp=a  
a=b  
b=temp  
print("a is",a)  
print("b is:",b)

def swap(st,in2,in3):  
 st[in2],st[in3]=st[in3],st[in2]  
  
  
l=[10,20,30,40]  
swap(l,1,2)  
print(swap)

11.Write function to find out whether given no is divisible by 3,5 and 7?

a=int(input("enter the number"))  
if(a%3==0 and a%5==0 and a%7==0):  
 print("divisible by 3,5,7")  
else:  
 print("not")

12.Write a Python program to construct the following pattern, using a nested for loop.

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

def p(n):  
 for i in range(0,n):  
 for j in range(0,i+1):  
 print("\*",end="")  
 print("\r")  
n=5  
p(n)

13.Write a Python program that accepts a word from the user and reverses it.

a=(input("enter the string"))  
print(a[::-1])

output:: enter the string akanksha

ahsknaka

14.Write a Python program that calculates the area of a circle based on the radius entered by the user.

radius=int(input("enter the radius"))  
area=3.14\*radius\*radius  
print(area)

enter the radius 4

50.24

15.Write a Python program that accepts the user's first and last name and prints them in reverse order with a space between them

fname=input("enter your fiirstname")  
lname=input("enter your lastname")  
print("hello"+lname+" "+fname)

output::: enter your fiirstname Akanksha

enter your lastname kumbhar

hellokumbhar Akanksha

16.Write a Python program that accepts a sequence of comma-separated numbers from the user and generates a list and a tuple of those numbers.

v=input("enter comma seprated numbers")  
list=v.split(",")  
tuple=tuple(list)  
print('list: ',list)  
print('tuple: ',tuple)

output::

enter comma seprated numbers2,3,4,5,7

list: ['2', '3', '4', '5', '7']

tuple: ('2', '3', '4', '

17.Write a Python program that accepts a filename from the user and prints the extension of the file

.

18.Write a Python program to display the first and last colors from the following list.

color\_list = ["Red","Green","White" ,"Black"]

color\_list = ["Red","Green","White" ,"Black"]  
print(color\_list[::len(color\_list)-1])

output:: ['Red', 'Black']

19.Write a Python program to display the examination schedule. (extract the date from exam\_st\_date).

exam\_st\_date = (11, 12, 2014)

Sample Output : The examination will start from : 11 / 12 / 2014

20.Write a Python program that accepts an integer (n) and computes the value of n+nn+nnn.

a=int(input("enter the integer"))  
n1=int("%s" % a )  
n2=int("%s%s" % (a,a))  
n3=int("%s%s%s"% (a,a,a))  
print(n1+n2+n3)

output:: enter the integer3

369

21.Write a Python program that prints the calendar for a given month and year.

Note : Use 'calendar' module.

import calendar  
year=int(input("enter the year"))  
month=int(input("enter the month"))  
print("the calander of:",calendar.month(year,month))

output:::

enter the year2003

enter the month1

the calander of: January 2003

Mo Tu We Th Fr Sa Su

1 2 3 4 5

6 7 8 9 10 11 12

13 14 15 16 17 18 19

20 21 22 23 24 25 26

27 28 29 30 31

22.Write a Python program to calculate the number of days between two dates.

Sample dates : (2014, 7, 2), (2014, 7, 11)

Expected output : 9 days

from datetime import date  
f=date(2014,7,2)  
l=date(2014,7,11)  
delta=l-f  
print(delta.days)

23.Write a Python program to get the volume of a sphere with radius six.

radius=6  
v=4/3\*3.14\*radius\*radius\*radius  
print("volume of speher is:",v)

volume of speher is: 904.3199999999998

24.Write a Python program to calculate the difference between a given number and 17. If the number is greater than 17, return twice the absolute difference.

def diff(n):  
 if n<=17:  
 return 17-n  
 else:  
 return(n-17)\*2  
print(diff(22))  
print(diff(14))

25.Write a Python program to test whether a number is within 100 of 1000 or 2000.

def near(n):  
 return((abs(1000-n)<=100)or (abs(2000-n)<=100))  
print(near(1000))  
print(near(900))  
print(near(800))  
print(near(2200))

output:::

True

True

False

False

26.Write a Python program to sum three given integers. However, if two values are equal, the sum will be zero.

a=5  
b=4  
c=8  
d=a+b+c  
if a==b or a==c or b==c :  
 e=d\*0  
 print(e)  
else:  
 print(d)

27.Write a Python function to multiply all the numbers in a list.

import numpy  
def mul(list):  
 return numpy.prod(list)  
a=[1,2,3,4,-5,6]  
print("list is",a)  
print("the product is:")  
print(mul(a))

28.Write a Python program to reverse a string.

Sample String: "1234abcd"

Expected Output: "dcba4321”

i="1234abcd"  
print(i[::-1])

29.Write a Python function to check whether a number falls within a given range

def test(n):  
 if n in range(3,9):  
 print("%s is in the range"%str(n))  
 else:  
 print("number is outside the range")  
test(5)

30.Write a Python function to find the maximum of three numbers.

31.Write a Python program to sum two integers. However, if the sum is between 15 and 20 it will return 20.

a=int(input("enter the number"))  
b=int(input("entter second number"))  
c=a+b  
if c in range(15,20):  
 print(20)  
  
else:  
 print(c)

32.Write a Python program that checks whether a string represents an integer or not.

Expected Output:

Input a string: Python

The string is not an integer.

33.Write a Python program that reads two integers representing a month and day and prints the season for that month and day.

Sample:-

Input the month (e.g. January, February etc.): july

Input the day: 31

Season is autumn

34.Write a Python program to find the median of three values.

Expected Output:

Input first number: 15

Input second number: 26

Input third number: 29

The median is 26.0

a=int(input("enter the first number"))  
b=int(input("enter the second number"))  
c=int(input("enter third number"))  
if b>a and a>c or c>a and a>b:  
 print("a is median",a)  
if a>b and b>c or c>b and b>a:  
 print(b,"b is median")  
if a>c and c>b or b>c and c>a:  
 print(c,"c is median")

35.Write a program to find the given number is positive or negative

Solution: #a=int(input("enter the 1st number"))  
#b=int(input("enter the second number"))  
#if(a>b):  
 # print("a is greater")  
#else:  
 #print("b is greater")  
def max(a,b):  
 if(a>b):  
 print("a is greater")  
 else:  
 print("b is greater")  
max(78,4)

36.Write a program to check if the given number is palindrome or not.

n=1234  
temp=n  
rev=0  
while(n>0):  
 d=n%10  
 rev=rev\*10+d  
 n=n//10  
 if(temp==rev):  
 print("yes")  
 else:  
 print("no")

37.Write a program to check if the given number is Armstrong or not.

n=1634  
sum=0  
temp=n  
while temp > 0:  
 d=temp%10  
 sum=+d\*\*3  
 temp//=10  
if n==sum:  
 print("yes")  
else:  
 print("no")

38.Write a program to check if the given strings are anagram or not

39.Write a program to find a maximum of two numbers.

*b=11  
if(a>b):  
 print("a is max")  
else:  
 print("b is max")'''*def max(a,b):  
 if(a>b):  
 print("a is max")  
 elif(b>a):  
 print(" b is max")  
 else:  
 print("equal")  
max(3,9)

40.Write a program to find a minimum of two numbers.

*A=10*

*b=11  
if(a<b):  
 print("a in minimum")  
else:  
 print("b is minum")'''*def min(a,b):  
 if(a<b):  
 print("a is min")  
 elif(b<a):  
 print(" b is min")  
 else:  
 print("equal")  
min(3,9)

41.Write a program to find a maximum of three numbers.

a=10  
b=90  
c=12  
if(a>b and a>c):  
 print("a is greater")  
elif(b>a and b>c):  
 print("b is greater")  
elif(c>a and c>b):  
 print("c is greater")  
else:  
 print("all are equal")

42.Write a program to find a minimum of three numbers.

a=10  
b=90  
c=12  
if(a<b and a<c):  
 print("a is minimun")  
elif(b<a and b<c):  
 print("b is minimum")  
elif(c<a and c<b):  
 print("c is minimum ")  
else:  
 print("error")

43.Write a program to find a factorial of a number.

*‘’’n=int(input("enter the number"))  
fact=1  
if(n<0):  
 print("invalid")  
elif(n==1 or n==0):  
 print("factorial is 1")  
else:  
  
 for i in range(2,n+1):  
 fact=fact\*i  
 print("factorial is ",fact)'''*def fact(x):  
 if(x==1):  
 return 1  
  
  
 else:  
 return x \* fact(x-1)  
print("factorial is",fact(5))

44.Write a program to find GCD of two numbers.

def gcd(a,b):  
 if(b==0):  
 return a  
 else:  
 return gcd(b,a%b)  
  
#print("the gcd is ",end="")  
print("gcd of given number is:",gcd(6,9))

45.Write a program to print the following pattern.

1

1 2

1 2 3

1 2 3 4

n=int(input("enter the number"))  
for i in range(1,n+1):  
 for j in range(1,i+1):  
 print(j,end="")  
 print("")

46.Write a Python program to find the largest element in a list.

l1=[1,2,3,2,5,6,8,0,4]  
l2=['hii','heelo',1,2]  
print(max(l1))

47.Write a Python program to count the frequency of each element in a list.

l1=[1,2,3,2,5,6,8,0,4]  
print(l1.count(2))

48.Write a Python program to find the common elements between two lists.

a=[1,2,3,4,5]  
b=[1,3,5,4]  
a=list(set(a).intersection(set(b)))  
print(a)

49.Write a Python program to find the second largest number in a list.

50.Write a Python program to remove duplicates from a list.

m=[1,2,2,2,3,4,6,7,6,7,0]  
s=list(set(m))  
print(s)

output:::[0, 1, 2, 3, 4, 6, 7]