

Question 1 to 150

Q1 = Write a Python program to print the following string in a specific format (see the output). Twinkle, twinkle, little star, How I wonder what you are! Up above the world so high, Like a diamond in the sky. Twinkle, twinkle, little star, How I wonder what you are"

```
print("""Twinkle, tiwinkle, little star,
        how I wonder what you are!
                up above the world so high,
                like a diamond in the sky.
Twinkle, twinkle, little star,
        How i woner that you are""")

Twinkle, tiwinkle, little star,
        how I wonder what you are!
                up above the world so high,
                like a diamond in the sky.
Twinkle, twinkle, little star,
        How i woner that you are
```

Q2 - Write a Python program to find out what version of Python you are using

```
sys.version
```

```
'3.12.7 | packaged by Anaconda, Inc. | (main, Oct 4 2024, 13:17:27)
[MSC v.1929 64 bit (AMD64)]'
```

Q3 - Write a Python program to display the current date and time.

Sample Output : Current date and time : 2014-07-05 14:34:14

```
from datetime import datetime
a = datetime.now()
print(a)
2025-06-18 17:16:57.902628
```

Q4 - Write a Python program that calculates the area of a circle based on the radius entered by the user.

Sample Output : r = 1.1 Area = 3.8013271108436504

```
from math import pi
r = float(input("input the radius of circle : "))
input the radius of circle : 1.1
```

```

area = pi * r ** 2
print(f"r = {r} area = {area}")
r = 1.1 area = 3.8013271108436504

```

Q5 -Write a Python program that accepts the user's first and last name and prints them in reverse order with a space between them.

```

First_name = input("First_name ")
Last_name = input("Last_name")
print(f"{Last_name} {First_name}")

First_name Manoj
Last_name Pandey

Pandey Manoj

```

Q6 - 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.

Sample data : 3, 5, 7, 23 Output : List : ['3', '5', '7', '23'] Tuple : ('3', '5', '7', '23')

```

numbers = input("Enter comma-separated numbers: ")
num_list = numbers.split(',')
num_tuple = tuple(num_list)

print("List:", num_list)
print("Tuple:", num_tuple)

Enter comma-separated numbers: 3,5,7,23

List: ['3', '5', '7', '23']
Tuple: ('3', '5', '7', '23')

```

Q7 - Write a Python program that accepts a filename from the user and prints the extension of the file.

Sample filename : abc.java Output : java

```

filename = input("give me the file name ")
f_extent = filename.split(".")
print("the extension of the file is : " + repr(f_extent[-1]))

give me the file name ab.java

the extension of the file is : 'ab.java'

```

Q8 -Write a Python program to display the first and last colors from the following list.

```
color_list = ["Red","Green","White","Black"]
```

```
colours = input("Give me the colours list: ")
col = colours.split(',') # Convert comma-separated string to list
print("Here are two colours:", repr(col[0]), "and", repr(col[2]))

Give me the colours list: red , green ,white , black

Here are two colours: 'red ' and 'white '

# Create a list called 'color_list' containing color names
color_list = ["Red", "Green", "White", "Black"]
# Print the first and last elements of the 'color_list' using string
formatting
# The '%s' placeholders are filled with the values of 'color_list[0]'
(Red) and 'color_list[-1]' (Black)
print("%s %s" % (color_list[0], color_list[-1]))

Red Black
```

Q9- 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
```

```
DATE = (11, 12, 2014)
print("The examination will start from: %i / %i / %i" % (DATE))

The examination will start from: 11 / 12 / 2014
```

Q10 = Write a Python program that accepts an integer (n) and computes the value of n+nn+nnn.

Sample value of n is 5 Expected Result : 615

```
a = int(input("here is an interget"))
n1 = int("%s" % a )
n2 = int("%s%s" %(a,a ))
n3 = int("%s%s%s" % (a,a,a))
print(n1+n2+n3)

here is an interget 5

615
```

Q11 = Write a Python program to print the documents (syntax, description etc.) of Python built-in function(s).

Sample function : abs() Expected Result : *abs(number) -> number* Return the absolute value of the argument

```
print(abs.__doc__)
```

Return the absolute value of the argument.

```
print(len.__doc__)
```

Return the number of items in a container.

```
print(sorted.__doc__)
```

Return a new list containing all items from the iterable in ascending order.

A custom key function can be supplied to customize the sort order, and the reverse flag can be set to request the result in descending order.

```
print(sum.__doc__)
```

Return the sum of a 'start' value (default: 0) plus an iterable of numbers

When the iterable is empty, return the start value.

This function is intended specifically for use with numeric values and may reject non-numeric types.

```
print(map.__doc__)
```

```
print(filter.__doc__)
```

map(func, *iterables) --> map object

Make an iterator that computes the function using arguments from each of the iterables. Stops when the shortest iterable is exhausted.
filter(function or None, iterable) --> filter object

Return an iterator yielding those items of iterable for which function(item) is true. If function is None, return the items that are true.

Q12 = Write a Python program that prints the calendar for a given month and year.

- Note : Use 'calendar' module.

```
import calendar
```

```
y = int(input("print the year boss"))
```

```
m = int(input("print the month baby"))
```

```
print(calendar.month(y,m))
```

```
print the year boss 2025
```

```
print the month baby 7
```

```
    July 2025
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
```

```
calendar.prmonth(2034,5)
```

```
    May 2034
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
```

Q13 - Write a Python program to print the following 'here document'.

- Sample string :
- a string that you "don't" have to escape
- This
- is a multi-line
- heredoc string -----> example

```
print("""
a string that you "dont have to escape
This
is a .....muti-line
heardoc string -----> example
""")
```

```
a string that you "dont have to escape
This
is a .....muti-line
heardoc string -----> example
```

Q14=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

a = date (2014, 7, 2)
b = date (2014, 7, 11)

hours = b-a           #if u try without .days u will get both days as well time
print(hours.days)

9

```

Q15 - Write a Python program to get the volume of a sphere with radius six.

```

import math
radius = 6
volume = 4/3 * math.pi * radius **3

print('volume of the sphere with radius 6 is:', volume)

volume of the sphere with radius 6 is: 904.7786842338603

```

Q16 - 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.

```

#self
g=int(input("first number here"))
o=int(input(" seond number"))

b = g-o
c = b*2
print('the number difference is:',b)
print("twice the number is:",c)

first number here 20
seond number 10

the number difference is: 10
twice the number is: 20

#2nd method

def difference(n):
    if n<= 17:
        return 17-n

    else:
        return(n-17)*2

num = int(input("enter a number dude"))

```

```
print((difference(num)))
```

```
enter a number dude 5
```

```
12
```

Q17 - Write a Python program to test whether a number is within 100 of 1000 or 2000.

```
def thousand(n):  
    return ((abs(1000-n) <= 100) or (abs(2000 - n) <= 100))
```

```
print(thousand(500))  
print(thousand(1500))  
print(thousand(1000))
```

```
False
```

```
False
```

```
True
```

```
def test(n):  
    if n <= 100:  
        return ("100 ke andr h bhai")  
  
    elif n <= 1000:  
        return("Bigger then 100 but shorter then 1k")  
  
    else:  
        return("Bigger then 1k but under 2k")
```

```
difference = int(input(" WRITE THE NUMBMER DUDE"))
```

```
print(test(difference))
```

```
WRITE THE NUMBMER DUDE 999
```

```
Bigger then 100 but shorter then 1k
```

Q18 = Write a Python program to calculate the sum of three given numbers. If the values are equal, return three times their sum.

```
def sum(a,b,c):  
    sum = a +b +c  
  
    if a==b==c:  
        sum = sum*3  
  
    return sum
```

```

print(sum(1,1,1))
print(sum(2,4,1))

9
7

def sum(a, b, c):
    if a==b==c:
        return 3*(a + b + c)
    else:
        return a + b + c

print(sum(1, 2, 3))

6

```

Q19 = Write a Python program to get a newly-generated string from a given string where "Is" has been added to the front. Return the string unchanged if the given string already begins with "Is".

```

def string(s):
    if s.startswith("is"):
        return s
    else:
        return "is" + s

print(string("array"))
print(string("isEmpty"))

isarray
isEmpty

```

Q20 = Write a Python program that returns a string that is n (non-negative integer) copies of a given string.

```

def string(text , n):
    result = ""

    for i in range(n):
        result = result + text

    return result

print(string(" hello " , 3))

hello  hello  hello

text = input(" enter a string ")
n = int(input(" enter how many times to repeat :"))

```



```
print(text * n)

enter a string manoj
enter how many times to repeat : 4

manojmanojmanojmanoj
```

Q21 - Write a Python program that determines whether a given number (accepted from the user) is even or odd, and prints an appropriate message to the user

```
number = int(input( "please write the numner"))

if num % 2 ==0 :
    print("this is odd number")
else:
    print("this is even number")

please write the numner 4
this is even number
```

Q22 - Write a Python program to count the number 4 in a given list.

```
numbers = [1, 4, 6, 4, 7, 4, 9, 4, 10]

count = numbers.count(4)

print("Number 4 appears", count, "times in the list.")

Number 4 appears 4 times in the list.

number = [ 1,4,6,4,5,3,4,5,6,8,9,7,6,]

n= int(input(" enter the number to count : " ))

count = number.count(n)
print(count)

enter the number to count : 4

3
```

Q23 - Write a Python program to get n (non-negative integer) copies of the first 2 characters of a given string. Return n copies of the whole string if the length is less than 2.

```
string = input(" you can write your text here ")
n = int(input("here is how mmany times u need "))
```

```

if len(string) < 2:
    result = string * n
else:
    result = string[:2] * n
print("result" , result)

you can write your text here manoj
here is how many times u need 4

result mamamama

string = input('enter the text here ')
n = int(input('how many times u wantthe entry' ))

if len(string) <2:
    result = string * n
else:
    result = string[:2] * n
print('result' , result)

enter the text here karbinaro
how many times u wantthe entry 5

result kakakakaka

```

Q24 = Write a Python program to test whether a passed letter is a vowel or not.

```

vowel = input(" write the vowel here")

if vowel in ('a' , 'e' , 'i' , 'o' , 'u'):
    result = ' yes it is passed this is vowel'
else:
    result = 'no this is not passed'

print(result)

write the vowel here a

yes it is passed this is vowel

#2nd

def vowel(check):
    all = 'aeiou'
    return check in all

print(vowel(input('write here'))))

```

write here a

True

Q25 = Write a Python program that checks whether a specified value is contained within a group of values.

```
def check(value ,group):  
    return value in group  
  
group = [10,20,30,40]  
value = int(input('enter a number to check'))  
  
if check(value, group):  
    print('yes , the value is in the group')  
else:  
    print('no, the value is not in the group')  
  
enter a number to check 3  
no, the value is not in the group
```

Q26 - Write a Python program to create a histogram from a given list of integers.

```
def hist(numbers):  
    for num in numbers:  
        print('*' * num)  
  
data = [2,4,6,4,5,]  
  
hist(data)  
  
*  
****  
*****  
****  
*****  
****  
*****  
****  
*****  
****  
*****
```

Q27 - Write a Python program that concatenates all elements in a list into a string and returns it.

```
data = ['h' , 'e' , 'l' , 'l' , 'e']  
  
def conct(elements):  
    result = ''.join(elements)
```

```

    return result
print(conct(data))
helle
words = ['m' , 'a' , 'n' , 'o' , 'j']
def add(likho):
    result = ''.join(likho)
    return result
print(add(words))
manoj

```

Q28 - Write a Python program to print all even numbers from a given list of numbers in the same order and stop printing any after 237 in the sequence.

Sample numbers list:

```

numbers = [
386, 462, 47, 418, 907, 344, 236, 375, 823, 566, 597, 978, 328, 615, 953, 345, 399, 162, 758, 219,
918, 237, 412, 566, 826, 248, 866, 950, 626, 949, 687, 217, 815, 67, 104, 58, 512, 24, 892, 894,
767, 553, 81, 379, 843, 831, 445, 742, 717, 958, 743, 527

```

```

numbers = [386, 462, 47, 418, 907, 344, 236, 375, 823, 566, 597, 978,
328, 615, 953, 345, 399, 162, 758, 219, 918, 237, 412, 566, 826, 248,
866, 950, 626, 949, 687, 217, 815, 67, 104, 58, 512, 24, 892, 894,
767, 553, 81, 379, 843, 831, 445, 742, 717, 958, 743, 527]

```

```

for num in numbers:
    if num==237:
        break

    if num % 2 == 0:
        print(num)

```

```

386
462
418
344
236
566
978
328
162
758
918

```

#2nd method

```
numbers = [386, 462, 47, 418, 907, 344, 236, 375, 823, 566, 597, 978, 328, 615, 953, 345, 399, 162, 758, 219, 918, 237, 412, 566, 826, 248, 866, 950, 626, 949, 687, 217, 815, 67, 104, 58, 512, 24, 892, 894, 767, 553, 81, 379, 843, 831, 445, 742, 717, 958, 743, 527]
```

```
for x in numbers:
    if x == 237:
        break

    if x % 2 == 0:
        print(x)
```

```
386
462
418
344
236
566
978
328
162
758
918
```

Q 29 = Write a Python program that prints out all colors from color_list_1 that are not present in color_list_2.

Test Data : color_list_1 = set(["White", "Black", "Red"])

color_list_2 = set(["Red", "Green"])

Expected Output : {'Black', 'White'}

```
color1 = set(["White", "Black", "Red"])
```

```
color2 = set(["Red", "Green"])
```

```
result = color1 - color2
print(result)
```

```
{'White', 'Black'}
```

Q30 = Write a Python program that will accept the base and height of a triangle and compute its area

```
b = int(input("aap yhaa base likhiyee "))
h = int(input("app yha height likhiye "))
```

```

a = 0.5 * b * h

print(f'this is area of traingle:' , a)

aap yhaa base likhiye 4
app yha height likhiye 4

this is area of traingle: 8.0

```

Q31 - Write a Python program that computes the greatest common divisor (GCD) of two positive integers.

```

import math

a = int(input("enter the fisrt number"))
b = int(input(' enter second number'))

print('the gcd is:' , math.gcd(a,b))

enter the fisrt number 336
enter second number 360

the gcd is: 24

```

Q32- Write a Python program to find the least common multiple (LCM) of two positive integers.

```

import math

a = int(input('enter the no .bro'))
b = int(input('fir se daal number'))

print('the lcm is:' , math.lcm(a,b))

enter the no .bro 336
fir se daal number 360

the lcm is: 5040

```

Q33 - Write a Python program to sum three given integers. However, if two values are equal, the sum will be zero.

```

a = int(input(' enter the first digit '))
b = int(input(' enter the second digit '))
c = int(input(' enter the third digit '))

def sum(a,b,c):
    if a==b or b==c or c==a :
        sum = 0

```

```

        return sum
    else:
        sum = a+b+c
        return sum

print(f'This is the value :',sum(a,b,c))

enter the first digit 3
enter the second digit 2
enter the third digit 4

This is the value : 9

```

Q34 - Write a Python program to sum two given integers. However, if the sum is between 15 and 20 it will return 20.

```

a = int(input('enter the first digit '))
b = int(input('enter the two digit'))

def sum(a,b):
    sum = a+b
    if sum in range(15,20):
        return (f'sum is bwtween 15 to 20:' , 20)

    else:
        return sum

print(sum(a,b))

enter the first digit 4
enter the two digit 11

('sum is bwtween 15 to 20:', 20)

```

Q35 - Write a Python program that returns true if the two given integer values are equal or their sum or difference is 5.

```

###
a = int(input('enter the first digit '))
b = int(input('enter the two digit'))

def rule(a,b):
    return a==b or a+b ==5 or abs(a-b) == 5

print(rule(a,b))

```

```
enter the first digit 2
enter the two digit 4
```

False

```
a = int(input('enter the first digit '))
b = int(input('enter the two digit'))
```

```
def rule(a,b):
    return a==b or a+b ==5 or abs(a-b) == 5
```

```
print(rule(a,b))
```

```
enter the first digit 4
enter the two digit 4
```

True

Q36 -Write a Python program to add two objects if both objects are integers

```
a = input("Enter first value: ")
b = input("Enter second value: ")
```

```
# Try to convert both to integers
```

```
if a.isdigit() and b.isdigit():
```

```
    result = int(a) + int(b)
```

```
    print("Sum is:", result)
```

```
else:
```

```
    print("Both inputs must be integers.")
```

```
Enter first value: 1
```

```
Enter second value: 5
```

```
Sum is: 6
```

```
a = input("Enter first value: ")
```

```
b = input("Enter second value: ")
```

```
# Try to convert both to integers
```

```
if a.isdigit() and b.isdigit():
```

```
    result = int(a) + int(b)
```

```
    print("Sum is:", result)
```

```
else:
```

```
    print("Both inputs must be integers.")
```

```
Enter first value: manoj
```

```
Enter second value: oa
```


Both inputs must be integers.

Q37 - Write a Python program that displays your name, age, and address on three different lines.

```
A = 'Name :    Manoj '  
b = 'Age :      19 '  
c = 'Address :  Banglore karnatake'
```

```
print(A + "\n" + b + "\n" + c)
```

```
Name :    Manoj  
Age :      19  
Address :  Banglore karnatake
```

```
A = input('whats your first name ')  
b = int(input('please write your age '))  
c = input('whats ur addres')
```

```
print(f' Name:' , A + "\n" + f'Age:' , str(b) + "\n" + f'address:', c)
```

```
whats your first name  majok  
please write your age  33  
whats ur addres  banglore
```

```
Name: majok  
Age: 33  
address: banglore
```

Q38 - Write a Python program to solve $(x + y) * (x + y)$.

```
a = int(input('x  please '))  
b = int(input('y  please '))
```

```
def square(a,b):  
    sum = a+b  
    return sum ** 2
```

```
print(square(a,b))
```

```
x  please  4  
y  please  3
```

49

Q39 - Write a Python program to compute the future value of a specified principal amount, rate of interest, and number of years.

```
amt = 10000
int= 3.5
years = 7

future_value = amt * (( 1 + (0.01 * int)) ** years)

print(round(future_value , 2))

12722.79
```

Q40 = rite a Python program to calculate the distance between the points (x1, y1) and (x2, y2).

```
import math

p1 = [3 ,5 ]
p2 = [4 ,10]

distance =math.sqrt(((p1[0] - p2[0]) ** 2) + ((p1[1] - p2[1]) ** 2))
print(distance)

5.0990195135927845

import math

x1 = float(input("Enter x1: "))
y1 = float(input("Enter y1: "))
x2 = float(input("Enter x2: "))
y2 = float(input("Enter y2: "))

distance = math.sqrt((x2 - x1) ** 2 + (y2 - y1)**2)
print("Distance between the points is:", round(distance, 2))

Enter x1: 4
Enter y1: 5
Enter x2: 3
Enter y2: 3

Distance between the points is: 2.24
```

Q41 - Write a Python program to check whether a file exists.

```
import os
file_path = 'mnoj.boss'

if os.path.exists(file_path):
```

```

        print("file exist")
    else:
        print('file not exist')
file not exist

import os
file_path = 'python practice.ipynb'

if os.path.exists(file_path):
    print("file exist")
else:
    print('file not exist')
file exist

```

Q42- Write a Python program to determine if a Python shell is executing in 32bit or 64bit mode on OS.

```

import struct
# packing and unpacking data in c style binary format we use struct

print(struct.calcsize("P") * 8)

64

import platform
bit_mode = platform.architecture()[0]
print(bit_mode)

64bit

```

Q43 -Write a Python program to get OS name, platform and release information.

```

import os
import platform

print('os name ', os.name)
print('platform', platform.system())
print('release' , platform.release())
print('version' , platform.version())

os name  nt
platform Windows
release 11
version 10.0.26100

```

Q44 - Write a Python program to locate Python site packages.

```
import site

print(site.getsitepackages())

['C:\\Users\\ASUS\\anaconda', 'C:\\Users\\ASUS\\anaconda\\Lib\\site-packages']
```

Q45 - Write a Python program that calls an external command.

```
# Import the 'os' module to work with the operating system.
import os

# Use 'os.system(command)' to execute the 'ls -l' command in the system's shell.
# This command lists the files and directories in the current directory and prints the result.
print(os.system('ls -l'))

1
```

Q 46 -Write a Python program to retrieve the path and name of the file currently being executed.

```
import os
import sys

# Get the current notebook path
notebook_path = os.path.abspath(sys.argv[0])

print("Notebook Path:", notebook_path)

Notebook Path: C:\Users\ASUS\anaconda\Lib\site-packages\ipykernel_launcher.py
```

Q47 -Write a Python program to find out the number of CPUs used.

```
import os

# Get the number of CPUs
num_cpus = os.cpu_count()

print("Number of CPUs:", num_cpus)

Number of CPUs: 8

# Import the 'multiprocessing' module to work with multi-processing features.
import multiprocessing

# Use 'multiprocessing.cpu_count()' to determine the number of
```

```

available CPU cores.
cpu_count = multiprocessing.cpu_count()

# Print the number of CPU cores available on the system.
print(cpu_count)

8

```

Q48 = Write a Python program to parse a string to float or integer.

```

a = "143.00"
b = float(a)
c = int(b)

print(a)
print(b)
print(c)

143.00
143.0
143

```

Q49 = Write a Python program to list all files in a directory.

```

import os

# Get current working directory
current_path = os.getcwd()

# List everything in current directory
items = os.listdir(current_path)

# Print only directories
for item in items:
    if os.path.isdir(os.path.join(current_path, item)):
        print(item)

.ipynb_checkpoints

```

Q50 = Write a Python program to print without a newline or space.

```

print("hello" , end='')
print("world" , end = '')

helloworld

a = "manoj"
b = "pandey"

print(a,b,end='', end='')

```

Cell In[81], line 4

```
print(a,b,end='', end='')  
      ^
```

SyntaxError: keyword argument repeated: end