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"

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
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
hearodoc string -----> example
""")

a string that you "dont have to escape
This
is a .....muti-line
hearodoc 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.

```
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) \le 100) \text{ or } (abs(2000 - n) \le 100))
print(thousand(500))
print(thousand(1500))
print(thousand(1000))
False
False
True
def test(n):
    if n \le 100:
        return ("100 ke andr h bhai")
    elif n \le 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
```

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:</pre>
    result = string * n
else:
    result = string[:2] *n
print("result" , result)
you can write your text here manoj
here is how mmany 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:</pre>
              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(numbners):
    for num in numbers:
        print('*' * num)

data = [2,4,6,4,5,]

hist(data)

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```

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 likhiyee 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:
```

Both inputs must be integers.

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

```
A = 'Name :
              Manoj'
              19'
b = 'Age :
c = 'Address : Banglore karnatake'
print(A + "\n" + b + "\n" + c)
Name :
         Manoj
Age :
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
```

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

file not exist

import os
file_path = 'python practice.ipynb'

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

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, sep='', end='')
manojpandey
```

Q51 = Write a Python program to determine the profiling of Python programs.

```
import cProfile
def sum():
    print(1+2)
cProfile.run('sum()')
3
         486 function calls (470 primitive calls) in 0.003 seconds
   Ordered by: standard name
                    percall
                              cumtime
   ncalls tottime
                                       percall
filename:lineno(function)
             0.000
                       0.000
                                0.000
                                          0.000 <frozen
abc>:121( subclasscheck )
                                          0.000 <frozen
             0.000
                       0.000
                                0.000
importlib. bootstrap>:1390( handle fromlist)
                                0.000
                                          0.000
             0.000
                       0.000
weakrefset.py:75( contains )
                                          0.000 asyncio.py:210(call at)
             0.000
                       0.000
                                0.000
        1
        2
             0.000
                       0.000
                                0.000
                                          0.000
asyncio.py:225(add callback)
                                0.000
                                          0.000
             0.000
                       0.000
asyncio.py:539( start select)
                       0.000
             0.000
                                0.000
                                         0.000
attrsettr.py:42( getattr
                       0.000
                                0.000
                                          0.000
             0.000
attrsettr.py:65(_get_attr_opt)
             0.000
                       0.000
                                0.000
      2/0
base events.py:1909( run once)
             0.000
                       0.000
                                0.000
                                          0.000
        5
base events.py:2004(get debug)
                                          0.000
             0.000
                       0.000
                                0.000
base events.py:539( check closed)
             0.000
                       0.000
                                0.000
        4
                                          0.000 base events.py:734(time)
        1
             0.000
                       0.000
                                0.000
                                          0.000
base events.py:743(call later)
             0.000
                       0.000
                                0.000
                                          0.000
base events.py:767(call at)
             0.000
                       0.000
                                0.000
                                          0.000
base events.py:785(call soon)
                       0.000
                                0.000
                                          0.000
             0.000
base events.py:814( call soon)
       24
             0.000
                       0.000
                                0.000
                                          0.000 enum.py:1129( new )
       51
             0.000
                       0.000
                                0.000
                                          0.000 enum.py:1544( get value)
        9
             0.000
                       0.000
                                0.000
                                          0.000 enum.py:1551( or )
        8
             0.000
                       0.000
                                0.000
                                          0.000 enum.py:1562( and
       24
             0.000
                       0.000
                                0.000
                                          0.000 enum.py:726( call
                                          0.000 events.py:111( init
        1
             0.000
                       0.000
                                0.000
```

```
0.000
                       0.000
                                 0.000
        1
                                          0.000 events.py:127( lt
        3
              0.000
                       0.000
                                 0.000
                                          0.000 events.py:36( init
        3
              0.000
                       0.000
                                 0.001
                                          0.000 events.py:86( run)
        2
                                 0.000
              0.000
                       0.000
                                          0.000 ioloop.py:541(time)
        1
              0.000
                       0.000
                                 0.000
                                          0.000
ioloop.py:596(call later)
                       0.000
                                 0.001
                                          0.000
              0.000
ioloop.py:742( run callback)
              0.000
                                          0.000
                       0.000
                                 0.000
iostream.py:137( event pipe)
              0.000
                       0.000
                                 0.000
                                          0.000
iostream.py:156( handle event)
              0.000
                       0.000
                                 0.000
                                          0.000
iostream.py:212( is master process)
              0.000
                       0.000
                                 0.000
                                          0.000
iostream.py:215( check mp mode)
              0.000
                                          0.000 iostream.py:254(closed)
        1
                       0.000
                                 0.000
              0.000
                       0.000
        1
                                 0.000
                                          0.000
iostream.py:258(schedule)
                       0.000
                                 0.000
                                          0.000
              0.000
iostream.py:275(<lambda>)
              0.000
                       0.000
                                 0.000
                                          0.000
iostream.py:277( really send)
                                          0.000
              0.000
                       0.000
                                 0.000
iostream.py:519( is master process)
              0.000
                       0.000
                                 0.000
                                          0.000
iostream.py:546( schedule flush)
              0.000
                       0.000
                                          0.000
                                 0.000
iostream.py:556(_schedule_in thread)
              0.000
                       0.000
                                 0.000
                                                 iostream.py:624(write)
      1/0
              0.000
                       0.000
                                 0.000
                                          0.000
        1
proactor_events.py:792(_loop_self_reading)
              0.000
                       0.000
                                 0.000
                                          0.000
proactor events.py:883( process events)
             0.000
                       0.000
                                 0.000
                                          0.000 queue.py:209( qsize)
        3
              0.000
                       0.000
                                 0.000
                                          0.000 queue.py:97(empty)
        1
              0.000
                       0.000
                                 0.000
                                          0.000 queues.py:173(qsize)
        1
              0.000
                       0.000
                                 0.000
                                          0.000 queues.py:225(get)
              0.000
                       0.000
                                 0.000
                                          0.000
        1
queues.py:256(get nowait)
              0.000
                       0.000
                                 0.000
                                          0.000
queues.py:322( consume expired)
              0.000
                       0.000
                                 0.000
                                          0.000
queues.py:59( set timeout)
              0.000
                       0.000
                                 0.000
                                          0.000 socket.py:621(send)
      9/8
              0.000
                       0.000
                                 0.000
                                          0.000
socket.py:698(send multipart)
                                 0.000
                                          0.000
              0.000
                       0.000
socket.py:777(recv multipart)
```

```
0.000
                       0.000
                                 0.000
                                          0.000
threading.py:1155( wait for tstate lock)
             0.000
                       0.000
                                 0.000
                                          0.000
threading.py:1222(is alive)
             0.000
                       0.000
                                 0.000
                                          0.000
threading.py:299( enter )
                       0.000
                                 0.000
                                          0.000
             0.000
threading.py:302( exit )
             0.000
                       0.000
                                 0.000
                                          0.000 threading.py:323(wait)
        1
             0.000
                       0.000
                                 0.000
                                          0.000 threading.py:394(notify)
        1
             0.000
                       0.000
                                 0.000
                                          0.000 threading.py:601(is set)
        3
             0.000
                       0.000
                                 0.000
                                          0.000
typing.py:1221( instancecheck
                                 0.000
             0.000
                       0.000
                                          0.000 typing.py:1285( hash )
        4
        3
             0.000
                       0.000
                                 0.000
                                          0.000
typing.py:1492( subclasscheck
             0.000
                       0.000
                                 0.000
                                          0.000 typing.py:2182(cast)
             0.000
        6
                       0.000
                                 0.000
                                          0.000 typing.py:392(inner)
        1
             0.000
                       0.000
                                 0.000
                                          0.000
windows events.py:429( check closed)
             0.000
      2/0
                       0.000
                                0.000
windows events.py:443(select)
             0.000
                       0.000
                                          0.000
                                0.000
windows events.py:482(recv)
                                 0.000
                                          0.000
             0.000
                       0.000
windows_events.py:55(_ init )
             0.000
                       0.000
                                 0.000
                                          0.000
windows events.py:704( register with iocp)
             0.000
                       0.000
                                 0.000
                                          0.000
windows events.py:714( register)
      2/0
             0.000
                       0.000
                                 0.000
windows_events.py:761(_poll)
                                          0.000
             0.000
                       0.000
                                 0.000
zmqstream.py:562(receiving)
             0.000
                                 0.000
                                          0.000
                       0.000
        3
zmqstream.py:566(sending)
             0.000
                       0.000
                                 0.000
                                          0.000
zmgstream.py:580( run callback)
             0.000
                       0.000
                                 0.001
                                          0.000
zmqstream.py:607( handle events)
                       0.000
                                          0.000
             0.000
                                 0.000
zmqstream.py:648( handle recv)
             0.000
                       0.000
                                 0.001
                                          0.000
zmqstream.py:687( rebuild io state)
             0.000
                       0.000
                                          0.000
                                 0.001
zmqstream.py:710(_update_handler)
             0.000
                       0.000
                                          0.000
                                0.001
        2
zmqstream.py:718(<lambda>)
             0.000
                       0.000
                                 0.000
                                          0.000 {built-in method
```

```
abc. abc subclasscheck}
             0.000
                       0.000
                                          0.000 {built-in method
                                0.000
_asyncio.get_running_loop}
             0.000
                       0.000
                                0.000
                                          0.000 {built-in method
contextvars.copy context}
             0.000
                       0.000
                                          0.000 {built-in method
                                0.000
heapq.heappush}
                       0.000
                                0.000
                                                {built-in method
             0.000
      2/0
overlapped.GetQueuedCompletionStatus}
             0.000
                       0.000
                                0.000
                                          0.000 {built-in method
thread.allocate lock}
             0.000
                       0.000
                                0.000
                                          0.000 {built-in method
builtins.getattr}
             0.000
                                0.000
                                          0.000 {built-in method
                       0.000
builtins.hasattr}
                                          0.000 {built-in method
             0.000
                       0.000
                                0.000
builtins.hash}
  110/104
                       0.000
                                          0.000 {built-in method
             0.000
                                0.000
builtins.isinstance}
                                          0.000 {built-in method
             0.000
                       0.000
                                0.000
builtins.issubclass}
       14
             0.000
                       0.000
                                0.000
                                          0.000 {built-in method
builtins.len}
             0.000
                       0.000
                                0.000
                                          0.000 {built-in method
builtins.max}
             0.000
                       0.000
                                          0.000 {built-in method
                                0.000
builtins.min}
                                          0.000 {built-in method
             0.000
                       0.000
                                0.000
math.ceil}
             0.000
                       0.000
                                0.000
                                          0.000 {built-in method
nt.getpid}
             0.000
                       0.000
                                0.000
                                          0.000 {built-in method
time.monotonic}
             0.000
                       0.000
                                0.000
                                          0.000 {built-in method
time.time}
                                0.000
                                          0.000 {method 'WSARecv' of
             0.000
                       0.000
' overlapped.Overlapped' objects}
                                          0.000 {method ' enter ' of
             0.000
                       0.000
                                0.000
' thread.RLock' objects}
                                          0.000 {method '__exit__' of
                       0.000
             0.000
                                0.000
' thread.RLock' objects}
             0.000
                       0.000
                                0.000
                                          0.000 {method '__exit__' of
' thread.lock' objects}
             0.000
                       0.000
                                0.000
                                          0.000 {method
'acquire restore' of 'thread.RLock'
                                        objects}
                       0.000
             0.000
                                0.000
                                          0.000 {method '_is_owned' of
' thread.RLock' objects}
             0.000
                       0.000
                                0.000
                                          0.000 {method ' release save'
of 'thread.RLock' objects}
```

```
0.000
                      0.000
                               0.000
                                         0.000 {method 'acquire' of
' thread.lock' objects}
             0.000
                      0.000
                               0.000
                                         0.000 {method
'add done callback' of 'asyncio.Future' objects}
             0.000
                      0.000
                               0.000
                                         0.000 {method 'append' of
'collections.deque' objects}
             0.000
                                         0.000 {method 'clear' of
                      0.000
                               0.000
'list' objects}
             0.000
                               0.000
                                         0.000 {method 'disable' of
                      0.000
' lsprof.Profiler' objects}
             0.000
                      0.000
                               0.000
                                         0.000 {method 'fileno' of
        1
' socket.socket' objects}
                                         0.000 {method 'keys' of 'dict'
             0.000
                      0.000
                               0.000
objects}
             0.000
                      0.000
                               0.000
                                         0.000 {method 'popleft' of
'collections.deque' objects}
             0.000
                      0.000
                               0.000
                                         0.000 {method 'release' of
' thread.lock' objects}
                               0.000
                                         0.000 {method 'remove' of
             0.000
                      0.000
'collections.deque' objects}
                                         0.000 {method 'result' of
             0.000
                      0.000
                               0.000
'asyncio.Future' objects}
             0.000
                               0.001
                                         0.000 {method 'run' of
                      0.000
' contextvars.Context' objects}
             0.000
                               0.000
                                         0.000 {method 'upper' of 'str'
                      0.000
objects}
             0.000
                      0.000
                               0.000
                                         0.000 {method 'write' of
' io.StringIO' objects}
```

Q52 = Write a Python program to print to STDERR.

```
import sys
print("This is an error message.", file=sys.stderr)
This is an error message.
```

Q53 = Write a Python program to access environment variables.

```
# Print all environment variables
print("All Environment Variables:")
for key, value in os.environ.items():
    print(f'{key}: {value}')
# Access a specific environment variable
```

```
print("\nAccessing a specific variable:")
print("PATH:", os.environ.get('PATH')) # or 'HOME', 'USERNAME', etc.
All Environment Variables:
ALLUSERSPROFILE: C:\ProgramData
APPDATA: C:\Users\ASUS\AppData\Roaming
COMMONPROGRAMFILES: C:\Program Files\Common Files
COMMONPROGRAMFILES(X86): C:\Program Files (x86)\Common Files
COMMONPROGRAMW6432: C:\Program Files\Common Files
COMPUTERNAME: DESKTOP-FAP3T6Q
COMSPEC: C:\WINDOWS\system32\cmd.exe
CONDA DEFAULT ENV: base
CONDA EXE: C:\Users\ASUS\anaconda\Scripts\conda.exe
CONDA PREFIX: C:\Users\ASUS\anaconda
CONDA PROMPT MODIFIER: (base)
CONDA PYTHON EXE: C:\Users\ASUS\anaconda\python.exe
CONDA ROOT: C:\Users\ASUS\anaconda
CONDA SHLVL: 1
DRIVERDATA: C:\Windows\System32\Drivers\DriverData
EFC 17636 1262719628: 1
EFC 17636 1592913036: 1
EFC 17636 2283032206: 1
EFC 17636 2775293581: 1
EFC 17636 3789132940: 1
FPS BROWSER APP PROFILE STRING: Internet Explorer
FPS BROWSER USER PROFILE STRING: Default
HOMEDRIVE: C:
HOMEPATH: \Users\ASUS
IPY INTERRUPT EVENT: 4176
JPY INTERRUPT EVENT: 4176
JPY PARENT PID: 4364
JPY SESSION NAME: C:\Users\ASUS\A,,I neuron classses 50 lpa manoj
package\python self practice\python practice.ipynb
LOCALAPPDATA: C:\Users\ASUS\AppData\Local
LOGONSERVER: \\DESKTOP-FAP3T6Q
NUMBER OF PROCESSORS: 8
ONEDRIVE: C:\Users\ASUS\OneDrive
OS: Windows NT
PATH: C:\Users\ASUS\anaconda;C:\Users\ASUS\anaconda\Library\mingw-w64\
bin;C:\Users\ASUS\anaconda\Library\usr\bin;C:\Users\ASUS\anaconda\
Library\bin;C:\Users\ASUS\anaconda\Scripts;C:\Users\ASUS\anaconda\
bin;C:\Users\ASUS\anaconda;C:\Users\ASUS\anaconda\Library\mingw-w64\
bin;C:\Users\ASUS\anaconda\Library\usr\bin;C:\Users\ASUS\anaconda\
Library\bin;C:\Users\ASUS\anaconda\Scripts;C:\WINDOWS\system32;C:\
WINDOWS;C:\WINDOWS\System32\Wbem;C:\WINDOWS\System32\
WindowsPowerShell\v1.0;C:\WINDOWS\System32\OpenSSH;C:\Users\ASUS\
anaconda3\Scripts;C:\Program Files\Git\cmd;C:\Users\ASUS\anaconda\
condabin;C:\Program Files\MySQL\MySQL Shell 8.0\bin;C:\Users\ASUS\
AppData\Local\Microsoft\WindowsApps;C:\Users\ASUS\AppData\Local\
Programs\Microsoft VS Code\bin;.
```

```
PATHEXT: .COM; .EXE; .BAT; .CMD; .VBS; .VBE; .JS; .JSE; .WSF; .WSH; .MSC
PROCESSOR ARCHITECTURE: AMD64
PROCESSOR IDENTIFIER: Intel64 Family 6 Model 140 Stepping 1,
GenuineIntel
PROCESSOR LEVEL: 6
PROCESSOR REVISION: 8c01
PROGRAMDATA: C:\ProgramData
PROGRAMFILES: C:\Program Files
PROGRAMFILES(X86): C:\Program Files (x86)
PROGRAMW6432: C:\Program Files
PROMPT: (base) $P$G
PSMODULEPATH: C:\Program Files\WindowsPowerShell\Modules;C:\WINDOWS\
system32\WindowsPowerShell\v1.0\Modules
PUBLIC: C:\Users\Public
PYDEVD USE FRAME EVAL: NO
SESSIONNAME: Console
SSL CERT FILE: C:\Users\ASUS\anaconda\Library\ssl\cacert.pem
SYSTEMDRIVE: C:
SYSTEMROOT: C:\WINDOWS
TEMP: C:\Users\ASUS\AppData\Local\Temp
TMP: C:\Users\ASUS\AppData\Local\Temp
USERDOMAIN: DESKTOP-FAP3T6Q
USERDOMAIN ROAMINGPROFILE: DESKTOP-FAP3T6Q
USERNAME: ASUS
USERPROFILE: C:\Users\ASUS
WINDIR: C:\WINDOWS
ZES ENABLE SYSMAN: 1
  CONDA OPENSLL CERT FILE SET: "1"
TERM: xterm-color
CLICOLOR: 1
FORCE COLOR: 1
CLICOLOR FORCE: 1
PAGER: cat
GIT PAGER: cat
MPLBACKEND: module://matplotlib inline.backend inline
Accessing a specific variable:
PATH: C:\Users\ASUS\anaconda;C:\Users\ASUS\anaconda\Library\mingw-w64\
bin;C:\Users\ASUS\anaconda\Library\usr\bin;C:\Users\ASUS\anaconda\
Library\bin;C:\Users\ASUS\anaconda\Scripts;C:\Users\ASUS\anaconda\
bin;C:\Users\ASUS\anaconda;C:\Users\ASUS\anaconda\Library\mingw-w64\
bin;C:\Users\ASUS\anaconda\Library\usr\bin;C:\Users\ASUS\anaconda\
Library\bin;C:\Users\ASUS\anaconda\Scripts;C:\WINDOWS\system32;C:\
WINDOWS;C:\WINDOWS\System32\Wbem;C:\WINDOWS\System32\
WindowsPowerShell\v1.0;C:\WINDOWS\System32\OpenSSH;C:\Users\ASUS\
anaconda3\Scripts;C:\Program Files\Git\cmd;C:\Users\ASUS\anaconda\
condabin;C:\Program Files\MySQL\MySQL Shell 8.0\bin;C:\Users\ASUS\
AppData\Local\Microsoft\WindowsApps;C:\Users\ASUS\AppData\Local\
Programs\Microsoft VS Code\bin;.
```

Q54 = Write a Python program to get the current username.

```
import getpass
print(getpass.getuser())
ASUS
import os
m = os.getlogin()
print(m)
ASUS
```

Q55 - Write a Python program to find local IP addresses using Python's stdlib

```
import socket

def local_ip():
    hostname = socket.gethostname()
    local_ip = socket.gethostbyname(hostname)
    return local_ip

print(local_ip)

<function local_ip at 0x000002D76E7DAFC0>
```

Q56 - Write a Python program to get the height and width of the console window.

```
import shutil
size = shutil.get_terminal_size()
print('console width:', size.columns)
print('console height:', size.lines)
console width: 80
console height: 24
```

Q57 - Write a Python program to get the execution time of a Python method.

```
import time

def example_function():
    total = 0
    for i in range(1000000):
        total += i
    return total

# Start time
start_time = time.time()
```

```
# Run the function
example_function()

# End time
end_time = time.time()

# Calculate execution time
execution_time = end_time - start_time
print(f"Execution Time: {execution_time:.5f} seconds")

Execution Time: 0.16121 seconds
```

Q 58 - Write a Python program to sum the first n positive integer

```
n = int(input('first positive interger:'))
total = n*(n+1) // 2
print(total)
first positive interger: 9
45
```

Q59 -Write a Python program to convert height (in feet and inches) to centimeters.

```
feet = int(input("enter the feet "))
inches = int(input("enter the inches"))

total = feet * 12 + inches
centimeter = total * 2.54

print(f"Height in centimeter: {centimeter:.2f} cm")
enter the feet 4
enter the inches 6

Height in centimeter: 137.16 cm
```

Q60 - Write a Python program to convert all units of time into seconds.

```
days = int(input("enter the number of days"))
hours = int(input("enter the number of hours"))
minutes = int(input("enter the number of minutes"))
seconds = int(input("enter the number of seconds"))

total_seconds = (days * 86400) + (hours * 3600) + (minutes * 60) + (seconds)
print(f"total time in seconds: {total_seconds}")
```

```
enter the number of days 4 enter the number of hours 3 enter the number of minutes 5 enter the number of seconds 2
```

total time in seconds: 356702