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"

```python
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

```python
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

```python
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

```python
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"]

```python
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

```python
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

```python
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
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

```python
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.

```python
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.

```python
#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

```python
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.

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

```python
count = numbers.count(4)
```

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

```
Number 4 appears 4 times in the list.
```

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

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

```python
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.

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

```python
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 mmany times u need   4

result mamamama
```

```python
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.

```python
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
```

```python
#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.

```python
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.

```python
def hist(numbners):
    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.

```python
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
```

```python
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

```python
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
```

```python
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.

```python
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).

```python
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.

```python
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).

```python
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
```