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 6
this is area of traingle: 12.0
```