1.

print('''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''')

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2. Write a Python program to find out what version of Python you are using.

import sys

print("Python version")

print (sys.version)

print("Version info.")

print (sys.version\_info)

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

Sample Output :

Current date and time :

2014-07-05 14:34:14

import datetime

now = datetime.datetime.now()

print ("Current date and time : ")

print (now.strftime("%Y-%m-%d %H:%M:%S"))

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4. 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("Nhap ban kinh hinh tron la: "))

print("Dien tich hinh tron co duong kinh " + str(r) + "la: ", pi \* r \* 2 )

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

Ho = input("Nhap ho va ten dem : ")

Ten = input("Nhap ten : ")

print ("Hello  " + Ten + " " + Ho)

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6. 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')

values = input("Nhap danh sach so cach nhau bang dau phay : ")

*list* = values.split(",")

*tuple* = tuple(*list*)

print('List : ',*list*)

print('Tuple : ',*tuple*)

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7. 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("Nhap ten cua tep: ")

f\_extns = filename.split(".")

print ("Phan mo rong cua tep la : " + repr(f\_extns[-1]))

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

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

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

print( "%s %s"%(color\_list[0],color\_list[-1]))



9. 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

ngaythi = (11,12,2014)

print( "Ngay thi bat dau tu : %i / %i / %i"%ngaythi)



10. 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("Nhap 1 so nguyen : "))

n1 = int(  a )

n2 = int( a+ a\*10 )

n3 = int(  a+a\*10+a\*100)

print (n1+n2+n3)

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11. 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\_\_)



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

Note : Use 'calendar' module.

import calendar

y = int(input("Nhap vao nam : "))

m = int(input("Nhap vao thang : "))

print(calendar.month(y, m))

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13. 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 "don't" have to escape

This

is a  ....... multi-line

heredoc string --------> example

""")

A screenshot of a computer program

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14. 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

ngay1 = date(2014, 7, 2)

ngay2 = date(2014, 7, 11)

delta = ngay2 - ngay1

print(delta.days)



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

from math import pi

r = float(input('Nhap ban kinh: '))

V = 4.0/3.0\*pi\* r\*\*3

print ('The tich cua hinh tron la: ', V)

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Description automatically generated

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

def difference(*n*):

    if *n* <= 17:

        return 17 - *n*

    else:

        return (*n* - 17) \* 2

n = int(input('Nhap 1 so: '))

x = int(input('Nhap 1 so: '))

print(difference(n))

print(difference(x))

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Description automatically generated

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

def near\_thousand(*n*):

    return ((abs(1000 - *n*) <= 100) or (abs(2000 - *n*) <= 100))

n = int(input('Nhap 1 so: '))

a = int(input('Nhap 1 so: '))

b = int(input('Nhap 1 so: '))

c = int(input('Nhap 1 so: '))

print(near\_thousand(n))

print(near\_thousand(a))

print(near\_thousand(b))

print(near\_thousand(c))

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

def TongBaSo(*x*, *y*, *z*):

     sum = *x* + *y* + *z*

     if *x* == *y* == *z*:

      sum = sum \* 3

     return sum

x = int(input('Nhap so thu nhat: '))

y = int(input('Nhap so thu hai: '))

z = int(input('Nhap so thu ba: '))

print(TongBaSo(x,y,z))

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19. 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 Chuoi(*text*):

  if len(*text*) >= 2 and *text* [:2] == "Is":

    return *text*

  return "Is" + *text*

print(Chuoi("Array"))

print(Chuoi("IsEmpty"))

A screenshot of a computer screen

Description automatically generated

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

def larger\_string(*text*, *n*):

   result = ""

   for i in range(*n*):

      result = result + *text*

   return result

chuoi = input('Nhap 1 chuoi: ')

n = int(input('Nhap so lan can nhan ban: '))

print(larger\_string(chuoi,n))

A screen shot of a computer screen

Description automatically generated

21. 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.

num = int(input("Nhap 1 so: "))

mod = num % 2

if mod > 0:

    print(f"So {num} la so le.")

else:

    print(f"So {num} la so chan.")

A screenshot of a computer

Description automatically generated

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

def substring\_copy(*text*, *n*):

  flen = 2

  if flen > len(*text*):

    flen = len(*text*)

  substr = *text*[:flen]

  result = ""

  for i in range(*n*):

    result = result + substr

  return result

print(substring\_copy('abcdef', 2))

print(substring\_copy('p', 3))*;*

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Description automatically generated

23. 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.

def chuoicon(*text*, *n*):

    flen = 2

    if flen > len(*text*):

        flen = len(*text*)

    chuoi = *text*[:flen]

    result = ""

    for i in range(*n*):

        result = result + chuoi

    return result

print(chuoicon('abcdef', 2))

print(chuoicon('p', 3))*;*

A screen shot of a computer

Description automatically generated

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

def KiemTra(*char*):

    all\_nguyenam = 'aeiou'

    return *char* in all\_nguyenam

print(KiemTra('c'))

print(KiemTra('e'))

A screen shot of a computer

Description automatically generated

25. Viết chương trình Python kiểm tra xem một giá trị cụ thể có nằm trong một nhóm giá trị hay không.

Dữ liệu kiểm tra :

3 -> [1, 5, 8, 3] : Đúng

-1 -> [1, 5, 8, 3] : Sai

def KiemTraDuLieu(*DuLieu*, *n*):

   for value in *DuLieu*:

       if *n* == value:

           return True

   return False

print(KiemTraDuLieu([1, 5, 8, 3], 3))

print(KiemTraDuLieu([5, 8, 3], -1))

A screen shot of a computer

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