**1. Formatted Twinkle Poem**

Write a Python program to print the following string in a specific format (see the output).  
*Sample String :* "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, twinkle, little star")

print("\tHow I wonder what you are!")

print("\t\tUp above the world so high,")

print("\t\tLike a diamond in the sky. ")

print("Twinkle, twinkle, little star,")

print("\tHow I wonder what you are!")

**2. Python Version Checker**

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

import sys

print("Python version")

print(sys.version)

**3. Current DateTime Display**

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

current\_datetime = datetime.datetime.now()

print("Thoi gian: ")

print(current\_datetime.strftime("%Y-%m-%d %H:%M:%S"))

**4. Circle Area Calculator**

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

import math

r = float(input("Nhap Ban Kinh r = "))

area = math.pi \* r \*\* 2

print(f"r = {r}")

print(f"Area = {area}")

**5. Reverse Full Name**

**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("Nhap ho: ")

last\_name = input("Nhap ten: ")

print(f"{last\_name} {first\_name}")

**6. List and Tuple Generator**

**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')**

data = input("Nhap so cach nhau bang dau phay : ")

list = data.split(",")

tuple = tuple(list)

print('List : ', list)

print('Tuple : ', tuple)

**7. File Extension Extractor**

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 tep: ")

file\_extension = filename.split('.')[-1]

print("Phần mở rộng của tệp là:", file\_extension)

**8. First and Last Colors**

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("Mau dau tien:", color\_list[0])

print("Mau cuoi cung:", color\_list[-1])

**9. Exam Schedule Formatter**

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

start = (11, 12, 2014)

print(f"Kỳ thi sẽ bắt đầu từ: { start [0]} / { start [1]} / { start [2]}")

**10. Number Expansion Calculator**

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

n = int(input("Nhập một số nguyên (n): "))

result = n + (n \* 10 + n) + (n \* 100 + n \* 10 + n)

print(f"Kết quả của n + nn + nnn là: {result}")

**11. Function Documentation Printer**

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. Monthly Calendar Display**

Write a Python program that prints the calendar for a given month and year.  
*Note :*Use 'calendar' module.

import calendar

year = int(input("nhap nam: "))

month = int(input("nhap thang (1-12): "))

print("\nLich Thang:")

print(calendar.month(year, month))

**13. Multi-line Here Document**

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

""")

**14. Days Between Dates**

Write a [Python](https://www.w3resource.com/python-exercises/python-basic-exercises.php) 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

date1 = date(2014, 7, 2)

date2 = date(2014, 7, 11)

delta = date2 - date1

print("Số ngày giữa hai ngày là:", delta.days)

**15. Sphere Volume Calculator**

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

import math

bankinh = 6

thetich = (4/3) \* math.pi \* bankinh^3

print(f"Thể tích của hình cầu có bán kính {bankinh} là: {thetich}")

**16. Difference from 17**

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

number = int(input("nhap 1 so: "))

if number > 17:

difference = 2 \* (number - 17)

else:

difference = 17 - number

print(f"Khác biệt giữa {number} và 17 là: {difference}")

**17. Number Range Tester**

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

number = int(input("nhap 1 so "))

if abs(number - 1000) <= 100 or abs(number - 2000) <= 100:

print(f"{number} nằm trong phạm vi 100 của 1000 hoặc 2000.")

else:

print(f"{number} không nằm trong phạm vi 100 của 1000 hoặc 2000.")

**18. Triple Sum Calculator**

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

num1 = int(input("nhap so dau tien: "))

num2 = int(input("nhap so thu 2: "))

num3 = int(input("nhap so thu 3: "))

if num1 == num2 == num3:

total = 3 \* (num1 + num2 + num3)

else:

total = num1 + num2 + num3

print(f"Tổng của ba số là: {total}")

**19. Prefix "Is" String Modifier**

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".

input\_string = input("nhap mot chuoi bat ki: ")

if input\_string.startswith("Is"):

result\_string = input\_string

else:

result\_string = "Is" + input\_string

print(f"Chuỗi mới là: {result\_string}")

**20. String Copy Generator**

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

string = input("nhap mot chuoi: ")

n = int(input("nhap so lan chep: "))

result = string \* n

print(f"danh sach chuoi: {result }")

**21. Even or Odd Checker**

**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("nhap 1 so: "))

if number % 2 == 0:

print(f"{number} la so chan.")

else:

print(f"{number} la so le.")

**22. Count 4 in List**

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

list = [1, 4, 2, 4, 3, 4, 5]

count= 0

for num in list:

if num == 4:

count += 1

print(f"So 4 da xuat hien {count} lan trong danh sach.")

**23. String Prefix Copies**

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("Nhap mot chuoi: ")

n = int(input("Nhap so lan sao chep: "))

if len(string) < 2:

result = string \* n

else:

result = string[:2] \* n

print(f"Chuoi moi la: {result}")

**24. Vowel Tester**

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

ky\_tu = input("Nhap mot ky tu: ").lower()

nguyenam = 'aeiou'

if ky\_tu in nguyenam:

print(f"{ky\_tu} la nguyen am.")

else:

print(f"{ky\_tu} khong phai la nguyen am.")

**25. Value in Group Tester**

Write a Python program that checks whether a specified value is contained within a group of values.  
*Test Data* :  
3 -> [1, 5, 8, 3] : True  
-1 -> [1, 5, 8, 3] : False

so = int(input("Nhap gia tri can kiem tra: "))

group = [1, 5, 8, 3]

if so in group:

print("True")

else:

print("False")