1.#write a program to findout the prime number  
  
num = int(input("enter the number:"))  
if num > 1:  
 for i in range (2,int(num/2)+1):  
 if(num % i) == 0:  
 print(num,"is not prime number")  
 break  
 else:  
 print(num,"is a prime number")  
else:  
 print(num,"is not a prime number")

Output:

enter the number:220

220 is not prime number

Process finished with exit code 0

2.#write a program to create the equation(a+b+c)\*(a-b-c)\*ab+a^2+b^2+(abc)^3  
  
a = int(input("enter a :"))  
b = int(input("enter b :"))  
c = int(input("enter c :"))  
equation = (a + b + c) \* (a - b - c) \* (a\*b) + (a^2) + (b^2) + (a\*b\*c)^3  
print(equation)

Output:

enter a :3

enter b :3

enter c :3

-215

Process finished with exit code 0

3.#urlist=['wood','knief','axe'],mylist=['tree','apple','mango','melon']  
  
def combine\_lists():  
 urlist = ['wood','knief','axe']  
 mylist = ['tree','apple','mango','melon']  
 for i in mylist:  
 urlist.append(i)  
 print(urlist)  
combine\_lists()

Output:

['wood', 'knief', 'axe', 'tree', 'apple', 'mango', 'melon']

Process finished with exit code 0

4.#write a program for natural number based on user input

num = int(input("enter a number:"))  
  
if num > 0:  
 print(num,"is a narural number")  
else:  
 print(num,"is not a natural number")

output:

enter a number:3

3 is a narural number

Process finished with exit code 0

enter a number:0

0 is not a natural number

Process finished with exit code 0

5.#write calss and function for the equation sqrt(x1-x2)^2+sqrt(y1+y2)^2 using try and except handling  
  
import math  
class Distance:  
 def \_\_init\_\_(self, x1, x2, y1, y2):  
 self.x1 = x1  
 self.x2 = x2  
 self.y1 = y1  
 self.y2 = y2  
 def calculate\_distance(self):  
 try:  
 distance = math.sqrt((self.x1 - self.x2)\*\*2 + (self.y1 - self.y2)\*\*2)  
 return distance  
 except valueError:  
 print("invalid input,please enter a numeric values")  
d = Distance(5, 6, 8, 9)  
result = d.calculate\_distance()  
print(result)

Output1.4142135623730951

Process finished with exit code 0

6.#name="Guvi python"-write a program to get "python" word from the string

name = input("enter a sentence :").split()  
print(name[1])

output:

enter a sentence :Guvi Python

Python

Process finished with exit code 0

7.#using class and function-write a program for palindrome Ex.madam  
  
class palindrome:  
 def \_\_init\_\_(self,word):  
 self.word = word  
  
 def is\_palindrome(self):  
 return self.word == self.word[::-1]  
word = (input("enter the word:"))  
print("the word is palindrome",word)

Output:

enter the word: MADAM

the word is palindrome MADAM

Process finished with exit code 0

8.#using file handling -write a text file in ur system with "hello world"  
  
with open('hello.txt', 'w') as file:  
 file.write('hello world')

Output:

Process finished with exit code 0

9.#create option button using tinker GUI in python

import tkinter as tk  
root = tk.Tk()  
root.title("option button example")  
var = tk.StringVar(value="option 1")  
def selection():  
 selection = var.get()  
 print(selection)  
option1 = tk.Radiobutton(root, text="option 1", variable=var, value="option 1", command=selection)  
option1.pack()  
root.mainloop()

10.#keep on;y numbers from the following string x = "89e9jcd^o38829@3%3,/mkl$w1  
  
x = "89e9jcd^o38829@3%3,/mkl$w1"  
n = ""  
for i in x:  
 if i.isdigit():  
 n = n + i  
print(n)

Output:

89938829331

Process finished with exit code 0