Code for internship

1.scientific calculator

def addition(a,b):

return a+b

def sub(a,b):

return a-b

def mul(a,b):

return a\*b

def div(a,b):

return a/b

print("select operations:")

print("1.Addition\n","2.sub\n","3.mul\n","4.div\n")

operation=int(input("enter your choice:1/2/3/4=="))

a=int(input("enter value of a:"))

b=int(input("enter value of b:"))

if operation == 1:

print (a, "+", b, "=", addition(a, b))

elif operation == 2:

print (a, "-", b, "=", subtraction(a, b))

elif operation == 3:

print (a, "\*", b, "=", multiplication(a, b))

elif operation == 4:

print (a, "/", b, "=", division(a, b))

else:

print("Invalid Input")

#password generator

import random

import string

allcharacters=string.alph+string.num+string.punct

length=int(input("enter the length of password:")

password = ''.join(random.choices(allcharacters, k=length))

print("Your password is:", password)

#for generaring multiple passwords

import random

import string

def generate\_password(length, count):

passwords = []

for i in range(count):

password = ''.join(random.choice(string.ascii\_letters + string.digits + string.punctuation) for \_ in range(length))

passwords.append(password)

return passwords

#create rock,paper ,scissor game using pyhton

# import random module

import random

import random

# print multiline instruction

# performstring concatenation of string

print('Winning rules of the game ROCK PAPER SCISSORS are :\n'

+ "Rock vs Paper -> Paper wins \n"

+ "Rock vs Scissors -> Rock wins \n"

+ "Paper vs Scissors -> Scissor wins \n")

while True:

print("Enter your choice \n 1 - Rock \n 2 - Paper \n 3 - Scissors \n")

# take the input from user

choice=int(input("Enter your choice :"))

# OR is the short-circuit operator

# if any one of the condition is true

# then it return True value

# looping until user enter invalid input

while choice > 3 or choice <1:

choice=int(input('Enter a valid choice please ☺'))

# initialize value of choice\_name variable

# corresponding to the choice value

if choice == 1:

choice\_name= 'Rock'

elif choice == 2:

choice\_name= 'Paper'

else:

choice\_name= 'Scissors'

# print user choice

print('User choice is \n',choice\_name)

print('Now its Computers Turn....')

# Computer chooses randomly any number

# among 1 , 2 and 3. Using randint method

# of random module

comp\_choice = random.randint(1,3)

# looping until comp\_choice value

# is equal to the choice value

while comp\_choice == choice:

comp\_choice = random.randint(1,3)

# initialize value of comp\_choice\_name

# variable corresponding to the choice value

if comp\_choice == 1:

comp\_choice\_name = 'rocK'

elif comp\_choice == 2:

comp\_choice\_name = 'papeR'

else:

comp\_choice\_name = 'scissoR'

print("Computer choice is \n", comp\_choice\_name)

print(choice\_name,'Vs',comp\_choice\_name)

# we need to check of a draw

if choice == comp\_choice:

print('Its a Draw',end="")

result="DRAW"

# condition for winning

if (choice==1 and comp\_choice==2):

print('paper wins =>',end="")

result='papeR'

elif (choice==2 and comp\_choice==1):

print('paper wins =>',end="")

result='Paper'

if (choice==1 and comp\_choice==3):

print('Rock wins =>\n',end= "")

result='Rock'

elif (choice==3 and comp\_choice==1):

print('Rock wins =>\n',end= "")

result='rocK'

if (choice==2 and comp\_choice==3):

print('Scissors wins =>',end="")

result='scissoR'

elif (choice==3 and comp\_choice==2):

print('Scissors wins =>',end="")

result='Rock'

# Printing either user or computer wins or draw

if result == 'DRAW':

print("<== Its a tie ==>")

if result == choice\_name:

print("<== User wins ==>")

else:

print("<== Computer wins ==>")

print("Do you want to play again? (Y/N)")

# if user input n or N then condition is True

ans = input().lower()

if ans =='n':

break

# after coming out of the while loop

# we print thanks for playing

print("thanks for playing")