1. Write a program to generate random numbers.

# For obtaining list of random numbers

import random

randomlist = []

for a in range(0,4):

q = random.randint(1,30)

randomlist.append(q)

print(randomlist)

OR

#For obtaining single random number

Import random

Print(random.randint(1,10))

1. Write a program to find the sum of the following series: 1 + 2 + 3 + …+ n

num = int(input("Enter a number: "))

if num < 0:

   print("Enter a positive number")

else:

   sum = 0

   # use while loop to iterate until zero

   while(num > 0):

       sum += num

       num -= 1

   print("The sum is",sum)

1. Write a program to demonstrate While loop.

count = 0

while (count < 3):

    count = count + 1

 print("Hello World")

1. Write a program to input week number and print week day.
2. Write a program to print 1-100

#Using for loop

print('Numbers from 1 to 100:')

for n in range(1, 101):

print(n, end=' ')

#Using while loop

print('Numbers from 1 to 100:')

n = 1

while n <= 100:

print(n, end=' ')

n = n+1

1. Write a program to print your name 10 times [Using loop]
2. Write a program to print 0-9 using for loop.
3. Write a program to print the series 2, 4, 6, .. ,20.

for num in range(2,20,2):

  #here inside range function first no denotes starting, second denotes end and third denotes the interval

   print(num)

1. Write a program to print even nos. till 100. using for loop.
2. Write a program to print the series 10, 9, 8, 7, ..,1.
3. Write a program to calculate factorial of a number using while loop.
4. Write a program to print average of 10 values entered by user.
5. sum = 0
6. given\_nums = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
7. *for* i *in* given\_nums:
8. sum = sum + i
9. average = sum/10
10. *print*(f'The average of these numbers is: {average}')

OR

sum = 0

count = 0

*while* count<10:

n = float(input('Enter a number: '))

sum = sum + n

count = count + 1

average = sum/10

*print*(f'The average of these numbers is: {average}')

1. Write a program to prepare a grocery bill. For that enter the name of items purchaged, quantity in which its is purchages, and its price per unit. Then display the bill in following format.

############################## B I L L##############################

Item Name                                 Item Quantity                                   Item Price

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Total Amount to be paid:

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*