**Program for Practice**

1. Program to check whether given Integer is whether integer is power of 2 or not

import math

def Log2(x):

return (math.log10(x) / math.log10(2));

def isPowerOfTwo(n):

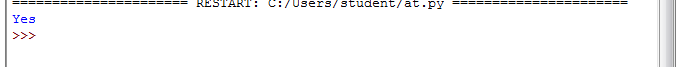
return (math.ceil(Log2(n)) == math.floor(Log2(n)));

if(isPowerOfTwo(16)):

print("Yes");

else:

print("No");



1. Program to find GCD of given numbers

print("Enter the two input")

a = int(input())

b = int(input())

i = 1

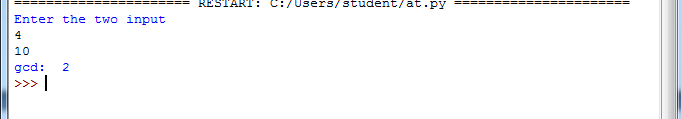
while(i <= a and i <= b):

if(a % i == 0 and b % i == 0):

gcd = i

i = i + 1

print("gcd: ", gcd)



1. Program to find LCM of given numbers

def gcd(x, y):

while(y):

x, y = y, x % y

return x

def lcm(x, y):

lcm = (x\*y)//gcd(x,y)

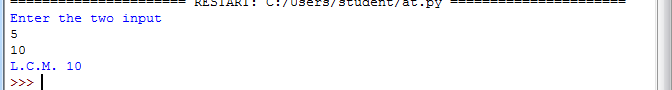
return lcm

print("Enter the two input")

a=int(input())

b=int(input())

print("L.C.M.", lcm(a,b))



1. Program to calculate product of digits.

def Prod(n):

pr = 1

while (n != 0):

pr = pr \* (n % 10)

n = n // 10

return pr

n = 2123

print(Prod(n))



1. Program to check whether given Integer is Palindrome or Not

a=input("Enter the input")

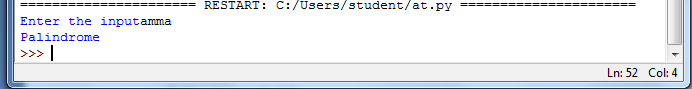
b=a[::-1]

if(a==b):

print("Palindrome");

else:

print("Not Palindrome");



1. Program to check whether given Integer is Armstrong or Not

num = int(input("Enter a number: "))

sum = 0

temp = num

while temp > 0:

digit = temp % 10

sum += digit \*\* 3

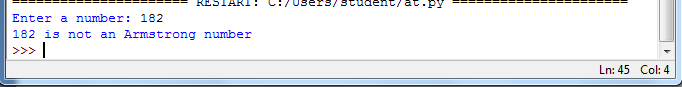
temp //= 10

if num == sum:

print(num,"is an Armstrong number")

else:

print(num,"is not an Armstrong number")



1. Program to multiply two matrix

X = [[1,2,3],

[4 ,5,6],

[7 ,8,9]]

Y = [[9,8,7],

[6,5,4],

[3,2,1]]

res = [[0,0,0],

[0,0,0],

[0,0,0]]

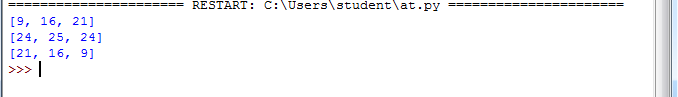
for i in range(len(X)):

for j in range(len(X[0])):

res[i][j] = X[i][j] \* Y[i][j]

for r in res:

print(r)



1. Program to transpose the Matrix

X = [[12,7],

[4 ,5],

[3 ,8]]

result = [[1,2,3],

[4,5,6]]

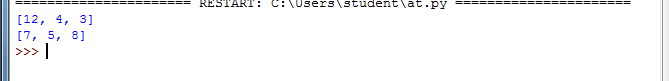
for i in range(len(X)):

for j in range(len(X[0])):

result[j][i] = X[i][j]

for r in result:

print(r)

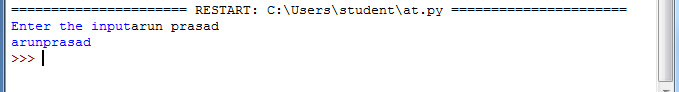


1. Remove the spaces in given String

a=input("Enter the input")

a=a.replace(" ","")

print(a,end="")



1. Remove the Vowels in given String

def vowel(str):

vowels = ('a', 'e', 'i', 'o', 'u')

for x in str.lower():

if x in vowels:

str = str.replace(x, "")

print(str)

str = "hi welcome to the python class for kit students"

vowel(str)

