**Day3-Program**

#Use of sep and end parameter in print function

for i in range(1,11):

print(i,i+1,sep="\t",end="\t")

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#For getting more than one input

import sys

m,n,p=sys.stdin.readline().split()

print(m,n,p)

print(type(m))

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#Pattern printing

n=int(input("Enter number of rows: "))

for i in range (n,0,-1):

print((n-i) \* ' ' + i \* '\*')

#String Slicing

str="kamala malar"

print("str[::]",str[::])

print("str[::-1]",str[::-1])

print(str[::-3])

print(str[:3:-1])

print(str[:6])

print("str[:3]", str[:3])

print("str[:3:]", str[:3:])

print("str[:3:1]", str[:3:1])

print("str[:3:-1]", str[:3:-1])

str="PYTHON"

print("str[-2:]=", str[-2:])

print("str[:-2]=", str[:-2])

print("str[-5:-2]=", str[-5:-2])

s= 'Don Quijote'

print(s[4::-1])

print(s[:4:-1])

lst=[1,2,3,4,5,6,7,8,9,10]

print(lst[:3:-1])

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#String Manipulation

string = 'python in easy steps'

print( '\nCapitalized:\t' , string.capitalize() )

print( '\nTitled:\t\t' , string.title() )

print( '\nCentered:\t' , string.center( 30 , '\*' ) )

print( '\nUppercase:\t' , string.upper() )

print( '\nJoined:\t\t' , string.join( '\*\*' ) )

print( '\nJustified:\t' ,string.rjust( 30 , '\*' ) )

print( '\nReplaced:\t' , string.replace( 's' , '\*' ) )

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#function program use of global key word in global varibal

def add(v1,v2):

global r

r=v1+v2

n1=3

n2=2

add(n1,n2)

print(r)

**Functions**

#Recursion Function

def factorial(n):

if n == 0:

return 1

else:

res=n\*factorial(n-1)

return res

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

result=factorial(f)

print("The result is:",result)

#Positional Arguments

def printinfo( name, age ):

print ("Name: ", name)

print ("Age ", age)

return

printinfo( "Sibi",5 )

#printinfo( 5,"Sibi" ) Change the order of position of argument wrong output or error

#printinfo( 5)

#def keyword Arguments

def printinfo( name, age ):

print ("Name: ", name)

print ("Age ", age)

return

printinfo( age = 7, name = "Nila" )

#printinfo(age=7,"Nila")Positional argument cannot follow keyword argument

#Default Argument

def printname(name,no=123):

print("Name:",name)

print("Number:",no)

return;

printname(name="raj")

printname(name="raju",no=456)

#Lambda Function

cube=lambda x: x\*x\*x

print(cube(2))

#Variable length argument

def info(arg1,\*var\_arg):

print("Output is:")

print(arg1)

for var in var\_arg:

print(var)

return

info( 10)

info(10,20,30,40,50)

info('a','b','c')

def info(\*var\_arg,arg1):

print("Output is:")

for var in var\_arg:

print(var)

return

info( arg1=10)

info(10,20,30,40,arg1=50)

info('a','b',arg1='c')

#Multiple return value

def compute(num1):

print("Number=",num1)

return num1\*num1, num1\*num1\*num1

square, cube=compute(4)

print("Square=",square,"Cube=",cube)