EX 2(1) Swapping two values

SWAPPING TWO NUMBERS - METHOD 1

Input

p = int(input("Enter the First Value :")) #getting Input from User

q = int(input("Enter the Second Value :"))

print("The values before swapping are",p,q) #To display

temp = p

p = q

q = temp

print("The Values after swapping are",p,q)

output

enter the first value :48

enter the second value :52

the value before swpping are 52 48

method 2

input

s = 59

t = 16

print("The values before Swapping : ",s,t)

s, t = s, t

print("The values after Swapping : ",s,t)

output

The values before Swapping : 59 16

The values after Swapping : 59 16

Method 3

input

x=45

y=25

x=x+y

y=x-y

x=x-y

print("the value after swapping are",x,y)

output

the value after swapping are 25 45

method 4

input

j=58

k=46

print("the value before swapping are",j,k)

j=j^k

k=j^k

j=j^k

print("the value after swapping are ",j,k)

output

the value before swapping are 58 46

the value after swapping are 46 58

EX 2 (2)circulate the n variable

input

s=int(input("Enter a the Values in the List :"))

list=[]

for i in range(0,s):

element=int(input("Enter the Value :"))

list.append(element)

print("Circulating the list")

for i in range(0,s):

element\_deleted=list.pop(0)

list.append(element\_deleted)

print(" The Circulated list after",i+1,"rotation",list)

output

Enter a the Values in the List :8

Enter the Value :1

Enter the Value :2

Enter the Value :3

Enter the Value :4

Enter the Value :5

Enter the Value :6

Enter the Value :7

Enter the Value :8

Circulating the list

The Circulated list after 1 rotation [2, 3, 4, 5, 6, 7, 8, 1]

The Circulated list after 2 rotation [3, 4, 5, 6, 7, 8, 1, 2]

The Circulated list after 3 rotation [4, 5, 6, 7, 8, 1, 2, 3]

The Circulated list after 4 rotation [5, 6, 7, 8, 1, 2, 3, 4]

The Circulated list after 5 rotation [6, 7, 8, 1, 2, 3, 4, 5]

The Circulated list after 6 rotation [7, 8, 1, 2, 3, 4, 5, 6]

The Circulated list after 7 rotation [8, 1, 2, 3, 4, 5, 6, 7]

The Circulated list after 8 rotation [1, 2, 3, 4, 5, 6, 7, 8]

Method 2

Input

def circulate(c,n):

for i in range (1,n+1):

d=c[i:]+c[:i]

print("Circulate","=",d)

return

c=[178,289,324,448,570,698,188,842,956,106]

n=int(input("Enter n :"))

circulate (c,n)

output

Enter n :6

Circulate = [289, 324, 448, 570, 698, 188, 842, 956, 106, 178]

Circulate = [324, 448, 570, 698, 188, 842, 956, 106, 178, 289]

Circulate = [448, 570, 698, 188, 842, 956, 106, 178, 289, 324]

Circulate = [570, 698, 188, 842, 956, 106, 178, 289, 324, 448]

Circulate = [698, 188, 842, 956, 106, 178, 289, 324, 448, 570]

Circulate = [188, 842, 956, 106, 178, 289, 324, 448, 570, 698]

Distance between two point

Input

x1=int(input("Enter the Value of x1 :"))

x2=int(input("Enter the Value of x2 :"))

y1=int(input("Enter the Value of y1 :"))

y2=int(input("Enter the Value of y2 :"))

D1=(x2-x1)\*\*2

D2=(y2-y1)\*\*2

result=(D1+D2)\*\*0.5

print("Distance between",(x1,x2),"and",(y1,y2),"is : ",result)

output

Enter the Value of x1 :2

Enter the Value of x2 :6

Enter the Value of y1 :4

Enter the Value of y2 :7

Distance between (2, 6) and (4, 7) is : 5.0

EX 2(4a) Arithmetic Calculations

INPUT

a= int(input("Enter the number1:"))

b= int(input("Enter the number2:"))

print("The addition of a and b is",a+b)

print("The difference between a and b is",a-b)

print("The difference between a and b is",a\*b)

print("The division of a and b is", a\*b)

print("The floor division of a and b is",a//b)

print("The modulus of a and b is", a%b)

print("The power of a and b is",a\*\*b)

OUTPUT

Enter the number1:6

Enter the number2:5

The addition of a and b is 11

The difference between a and b is 1

The difference between a and b is 30

The division of a and b is 30

The floor division of a and b is 1

The modulus of a and b is 1

The power of a and b is 7776

Calculating the total cost of text book

input

s= int(input("Enter the total number of books:"))

list=[]

total = 0

for i in range(0,s):

       books\_cost = int(input("Enter the costs of the books:"))

       list.append(books\_cost)

for ele in range(0, len(list)):

       total = total + list[ele]

print("The total costs of the book is:", total)

output

Enter the total number of books2

Enter the costs of the books:20

Enter the costs of the books:40

**The total costs of the book is: 60**

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