

CLASS TEST-4

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SUBJECT CODE: CSA0836

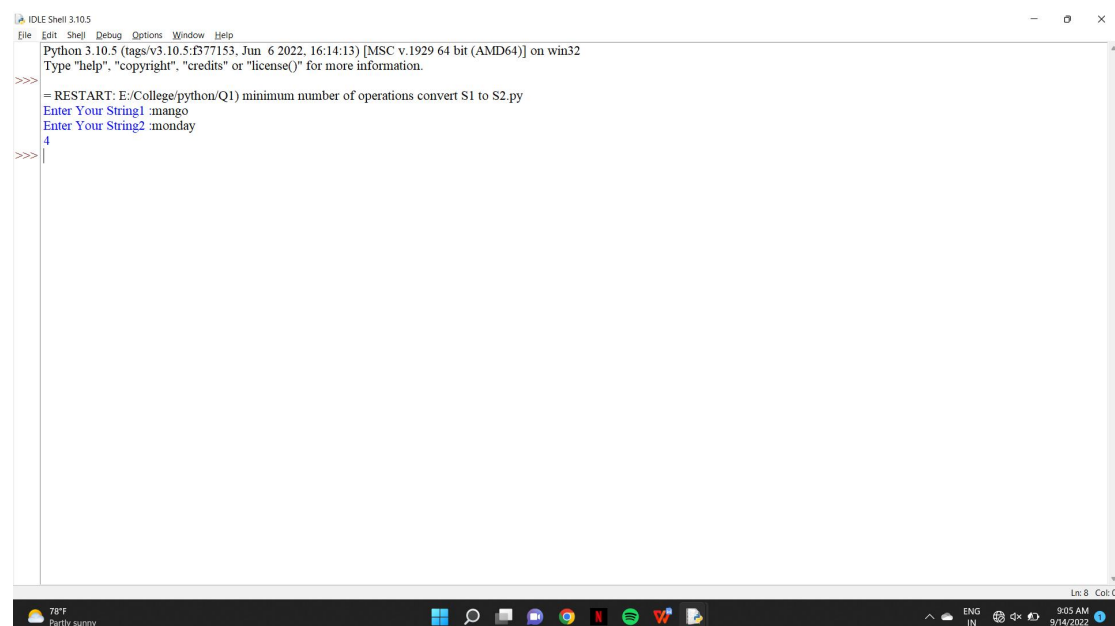
SUBJECT: PYTHON PROGRAMMING

DATE: 14/09/22

1) Returning minimum number of operation covert S1 and S2

```
def distance(str1, str2, m, n):
    if m == 0:
        return n
    if n == 0:
        return m
    if str1[m-1] == str2[n-1]:
        return distance(str1, str2, m-1, n-1)
    return 1 + min(distance(str1, str2, m, n-1),
                    distance(str1, str2, m-1, n),
                    distance(str1, str2, m-1, n-1)
                )
str1 = input("Enter Your String1 :")
str2 = input("Enter Your String2 :")
print (distance(str1, str2, len(str1), len(str2)))
```

OUTPUT:

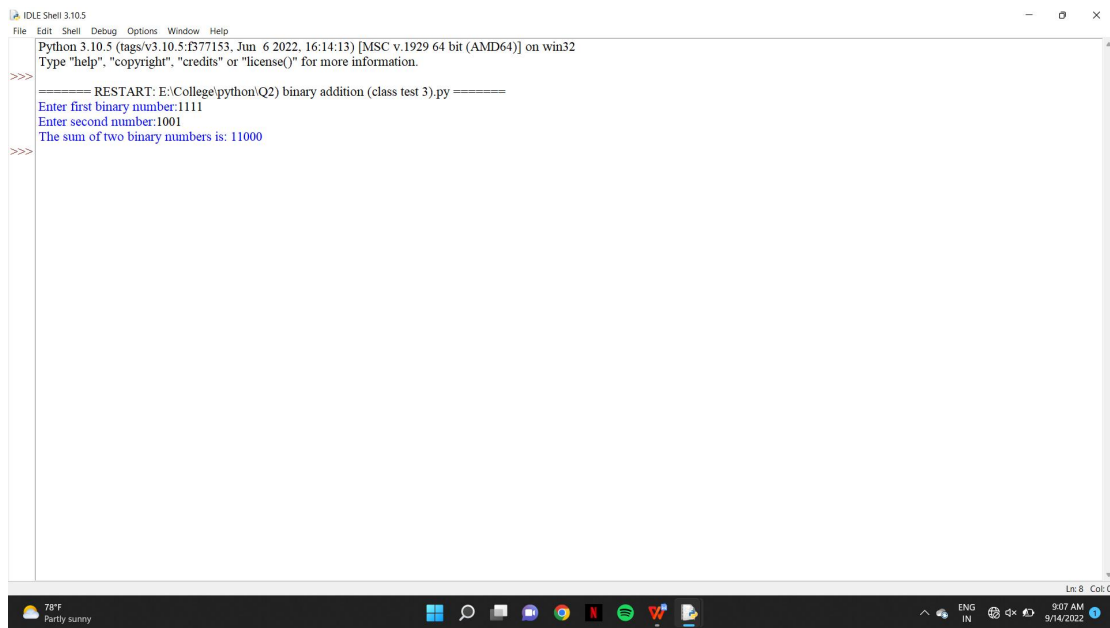


```
Python 3.10.5 (tags/v3.10.5:f377153, Jun 6 2022, 16:14:13) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: E:/College/python/Q1) minimum number of operations convert S1 to S2.py
Enter Your String1 :mango
Enter Your String2 :monday
4
>>>
```

2) Binary addition

```
a=input("Enter first binary number:")
b=input("Enter second number:")
sum=bin(int(a,2)+int(b,2))
print("The sum of two binary numbers is:",sum[2:])
```

OUTPUT:



The screenshot shows an IDE Shell window titled "IDLE Shell 3.10.5". The window contains the following text:

```
Python 3.10.5 (tags/v3.10.5:1377153, Jun 6 2022, 16:14:13) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: E:\College\python\Q2) binary addition (class test 3).py =====
Enter first binary number:1111
Enter second number:1001
The sum of two binary numbers is: 11000
>>>
```

The window also shows a taskbar at the bottom with various icons and a system clock indicating 9:07 AM on 9/14/2022.

3) Permutations

```
from itertools import permutations
a=eval(input("Enter list:"))
lst=permutations(a)
for i in list(lst):
    print(i)
```

OUTPUT:

```
Python 3.10.5 (tags/v3.10.5:1377153, Jun 6 2022, 16:14:13) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=====RESTART: E:\College\python\q3) permutaions (class test 4)-py =====
Enter list:[1,2,3,4]
(1, 2, 3, 4)
(1, 2, 4, 3)
(1, 3, 2, 4)
(1, 3, 4, 2)
(1, 4, 2, 3)
(1, 4, 3, 2)
(2, 1, 3, 4)
(2, 1, 4, 3)
(2, 3, 1, 4)
(2, 3, 4, 1)
(2, 4, 1, 3)
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(3, 1, 2, 4)
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(4, 1, 3, 2)
(4, 2, 1, 3)
(4, 2, 3, 1)
(4, 3, 1, 2)
(4, 3, 2, 1)
>>>
```

The screenshot shows an IDLE Shell window with the following content:

- Python 3.10.5 (tags/v3.10.5:1377153, Jun 6 2022, 16:14:13) [MSC v.1929 64 bit (AMD64)] on win32
- Type "help", "copyright", "credits" or "license()" for more information.
- =====RESTART: E:\College\python\q3) permutaions (class test 4)-py =====
- Enter list:[1,2,3,4]
- (1, 2, 3, 4)
- (1, 2, 4, 3)
- (1, 3, 2, 4)
- (1, 3, 4, 2)
- (1, 4, 2, 3)
- (1, 4, 3, 2)
- (2, 1, 3, 4)
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- (4, 1, 3, 2)
- (4, 2, 1, 3)
- (4, 2, 3, 1)
- (4, 3, 1, 2)
- (4, 3, 2, 1)

The taskbar at the bottom shows the system clock as 9:09 AM on 9/14/2022, and the weather as 72°F Partly sunny.