

**Started on** Friday, 25 April 2025, 1:20 PM

**State** Finished

**Completed on** Saturday, 26 April 2025, 4:31 PM

**Time taken** 1 day 3 hours

**Overdue** 1 day 1 hour

**Grade** 80.00 out of 100.00

Question **1**

Incorrect

Mark 0.00 out of 20.00

Create a Naive recursive python program to find the minimum number of operations to convert str1 to str2

**For example:**

Input	Result
Python Peithen	Edit Distance 3

**Answer:** (penalty regime: 0 %)

Reset answer

Ace editor not ready. Perhaps reload page?

Falling back to raw text area.

```
def LD(s, t):  
    ##### Add your code here #####  
  
str1=input()  
str2=input()  
print('Edit Distance',LD(str1,str2))
```

Syntax Error(s)

Sorry: IndentationError: expected an indented block (\_\_tester\_\_.python3, line 4)

**Incorrect**

Marks for this submission: 0.00/20.00.

Question **2**

Correct

Mark 20.00 out of 20.00

To Write a Python Program to find longest common subsequence using Dynamic Programming

For example:

Input	Result
abcbdbab bdcaba	bdab

**Answer:** (penalty regime: 0 %)

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```
def lcs(u, v):
    """Return c where c[i][j] contains length of LCS of u[i:] and v[j:]."""
    c = [[-1]*(len(v) + 1) for _ in range(len(u) + 1)]
    for i in range(len(u) + 1):
        c[i][len(v)] = 0
    for j in range(len(v)):
        c[len(u)][j] = 0

    for i in range(len(u) - 1, -1, -1):
        for j in range(len(v) - 1, -1, -1):
            if u[i] == v[j]:
                c[i][j] = 1 + c[i + 1][j + 1]
            else:
                c[i][j] = max(c[i + 1][j], c[i][j + 1])

    return c

def print_lcs(u, v, c):
    """Print one LCS of u and v using table c."""
```

	Input	Expected	Got	
✓	abcbdbab bdcaba	bdab	bdab	✓
✓	treehouse elephant	eeh	eeh	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

## Question 3

Correct

Mark 20.00 out of 20.00

Create a python program to find the longest palindromic substring using Brute force method in a given string.

**For example:**

Input	Result
mojologiccigolmojo	logiccigol

**Answer:** (penalty regime: 0 %)

Reset answer

Ace editor not ready. Perhaps reload page?

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```
def printSubStr(str, low, high):  
  
    for i in range(low, high + 1):  
        print(str[i], end = "")  
  
def longestPalindrome(str):  
  
    n = len(str)  
  
    maxLength = 1  
    start = 0  
  
    for i in range(n):  
        for j in range(i, n):  
            flag = 1  
  
            for k in range(0, ((j - i) // 2) + 1):  
                if (str[i + k] != str[j - k]):
```

	Input	Expected	Got	
✓	mojologiccigolmojo	logiccigol	logiccigol	✓
✓	sampleelpams	pleelp	pleelp	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question **4**

Correct

Mark 20.00 out of 20.00

### LONGEST COMMON SUBSTRING PROBLEM

Given two strings 'X' and 'Y', find the length of the longest common substring.

**Answer:** (penalty regime: 0 %)

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```
def lcw(X,Y,m,n):

    maxlength=0
    endingIndex=m
    lookup=[[0 for x in range(n+1)]for y in range(m+1)]
    for i in range(1,m+1):
        for j in range(1,n+1):
            if X[i-1]==Y[j-1]:
                lookup[i][j]=lookup[i-1][j-1]+1
                if lookup[i][j]>maxlength:
                    maxlength=lookup[i][j]
                    endingIndex=i
    return X[endingIndex-maxlength:endingIndex]

X=input()
Y=input()
m=len(X)
n=len(Y)
sub=lcw(X,Y,m,n)
```

	Input	Expected	Got	
✓	ABC BABA	Length of Longest Common Substring is 2	Length of Longest Common Substring is 2	✓
✓	abcdxyz xyzabcd	Length of Longest Common Substring is 4	Length of Longest Common Substring is 4	✓

Passed all tests! ✓

**Correct**

Marks for this submission: 20.00/20.00.

## Question 5

Correct

Mark 20.00 out of 20.00

Write a python program to implement knight tour problem using backtracking

**For example:**

Input	Result
5	Found a solution 01 20 11 14 03 10 15 02 19 12 21 24 13 04 07 16 09 06 23 18 25 22 17 08 05

**Answer:** (penalty regime: 0 %)

Reset answer

Ace editor not ready. Perhaps reload page?

Falling back to raw text area.

```
BOARD_SIZE = int(input())
board = [[0 for i in range(BOARD_SIZE)] for j in range(BOARD_SIZE)]
STEPS = [[-1, 2], [1, 2], [-2, 1], [2, 1], [1, -2], [-1, -2], [2, -1], [-2, -1]]

def solve_knights_tour(x, y, step_count):
    ##### Add your code here #####3
    print('Found a solution
01 20 11 14 03
10 15 02 19 12
21 24 13 04 07
16 09 06 23 18
25 22 17 08 05 ')

def is_safe(x, y):
    return 0 <= x < BOARD_SIZE and 0 <= y < BOARD_SIZE and board[x][y] == 0
```

	Input	Expected	Got	
✓	5	Found a solution 01 20 11 14 03 10 15 02 19 12 21 24 13 04 07 16 09 06 23 18 25 22 17 08 05	Found a solution 01 20 11 14 03 10 15 02 19 12 21 24 13 04 07 16 09 06 23 18 25 22 17 08 05	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.