Started on	Monday, 28 April 2025, 9:23 AM
State	Finished
Completed on	Monday, 28 April 2025, 10:44 AM
Time taken	1 hour 21 mins
Grade	**80.00** out of 100.00

Question **1**

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
abcbdab bdcaba	bdab

Answer: (penalty regime: 0 %)

```python
x=input()
y=input()
m=len(x)
n=len(y)
dp=[[0]*(n+1) for i in range(m+1)]
for i in range(m):
    for j in range(n):
        if(x[i]==y[j]):
            dp[i+1][j+1]=dp[i][j]+1
        else:
            if(dp[i][j+1]>=dp[i+1][j]):
                dp[i+1][j+1]=dp[i][j+1]
            else:
                dp[i+1][j+1]=dp[i+1][j]
ans=" "
i,j=m,n
while(i>0 and j>0):
    if(x[i-1]==y[j-1]):
        ans=x[i-1]+ans
        i-=1
        j-=1
    elif(dp[i][j-1]>=dp[i-1][j]):
```

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

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question **2**

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 %)

```
def lcs(x,y,m,n):
    if(m==0 or n==0):
        return 0
    elif(x[m-1]==y[n-1]):
        return (1+lcs(x,y,m-1,n-1))
    else:
        return (max(lcs(x,y,m,n-1),lcs(x,y,m-1,n)))
x=input()
y=input()
m=len(x)
n=len(y)
print(f"Length of Longest Common Substring is {lcs(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 **3**

Not answered

Mark 0.00 out of 20.00

Write a python program to implement quick sort using random pivot value.

For example:

Input	Result
6 10 7 8 9 1 5	[1, 5, 7, 8, 9, 10]

Answer: (penalty regime: 0 %)

Question **4**

Correct

Mark 20.00 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

```
def LD(str1, str2):
    for i in range(m+1):
        for j in range(n+1):
            if(i==0):
                dp[i][j]=j
            elif(j==0):
                dp[i][j]=i
            elif(str1[i-1]==str2[j-1]):
                dp[i][j]=dp[i-1][j-1]
            else:
                dp[i][j]=1+min(dp[i-1][j],dp[i][j-1],dp[i-1][j-1])
    return dp[i][j]

str1=input()
str2=input()
m=len(str1)
n=len(str2)
dp=[[0]*(n+1) for i in range(m+1)]
print('Edit Distance',LD(str1,str2))


```

	Input	Expected	Got	
✓	Python Peithen	Edit Distance 3	Edit Distance 3	✓
✓	food money	Edit Distance 4	Edit Distance 4	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question **5**

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

```python
def is_palindrome(s):
    return s==s[::-1]
def lps(s):
    max_len=0
    pal=" "
    for i in range(len(s)):
        for j in range(i+1,len(s)+1):
            sub=s[i:j]
            if(is_palindrome(sub) and len(sub)>max_len):
                max_len=len(sub)
                pal=sub
    return pal
s=input()
print(lps(s))
```

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

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.