// In the main function we get text files from user. If there are more than two files, we compare first file with second and their result with third so on.

//Function to convert text file to string

Convert\_to\_String(File)

1. Aj=File.length
2. Let A[0….j] be a string
3. for i=0 to j
4. A[i]= character of file
5. return A

Clear\_Sensitivity(A)

1. for i =0 to A.length
2. if A[i] >= 65 and A[i] <= 92
3. A[i] = A[i] +32
4. return A

Remove\_Spaces(A)

1. i = 1
2. size = A.length
3. while i <= A.length
4. if A[i] = “ ”
5. A[i] = A[i+1]
6. size = size- 1
7. return A, size

LCS\_length( X, Y)

1. m = X.length
2. n = Y.length
3. let b[1…m,1…n] and c[0…m,0...n] be new tables
4. for i = 0 to m
5. c[i][0] = 0
6. for j = 0 to n
7. c[0][j] = 0
8. for i = 1 to m
9. for j = 1 to n
10. if x[ i] == y[ j]
11. c[i][j] = c[i - 1][j - 1] + 1
12. b[i][j] = '/'
13. else if c[i - 1][j] >= c[i][j - 1]
14. c[i][j] = c[i - 1][j]
15. b[i][j] = '|'
16. else c[i - 1][j] = c[i][j - 1]
17. c[i][j] = c[i][j - 1]
18. b[i][j] = '-'
19. return c and b

//Getting common characters and their index

Print\_LCS( b, X, i, j)

1. int q=0
2. let D[0…i] be the array to keep index
3. if i == 0 or j == 0
4. return
5. if b[i][j] == '/'
6. Print\_LCS(b, x, i - 1, j - 1)
7. print x[i]
8. D[q] = i
9. q = q+1
10. return D
11. else if b[i][j] == '|'
12. Print\_LCS(b, x, i - 1, j)
13. else Print\_LCS(b, x, i, j - 1)

This takes O ( m + n ) since either i or j is decremented in the recursion

// Getting percentage of Plagiarism

Plagiarism\_Percentage (D,A)

// A is given file here

1. i=A.length
2. x=D.length
3. p=x/i \*100
4. print p