**//EditDistance**

**/\***

**Parameter: given two vector (modify: given two string)**

**Return: min cost for edit distance with insert, delete, replace operation**

**Complexity: O(m\*n)**

**\*/**

int editDistance( vector<int>v1, vector<int>v2 )

{

int m=v1.size(),n=v2.size();

int C[m+5][n+5];

C[0][0]=0;

for(int i=1;i<=m;i++)

C[i][0]=i;

for(int j=1;j<=n;j++)

C[0][j]=j;

for(int i=1;i<=m;i++)

for(int j=1;j<=n;j++)

C[i][j] = min(min(C[i-1][j]+1, C[i][j-1]+1), C[i-1][j-1]+(v1[i-1]==v2[j-1] ? 0:1));

return C[m][n];

}