string shortestCommonSupersequence(string s1, string s2) {

int n = s1.size();

int m = s2.size();

vector<vector<int> > dp(n+1,vector<int> (m+1));

for(int i=0;i<=n;i++){

dp[i][0] = 0;

}

for(int j=0;j<=m;j++){

dp[0][m] = 0;

}

for(int i=1;i<=n;i++){

for(int j=1;j<=m;j++){

if(s1[i-1]==s2[j-1]){

dp[i][j] = dp[i-1][j-1] + 1;

}

else{

dp[i][j] = max(dp[i-1][j],dp[i][j-1]);

}

}

}

int i = n, j=m;

string res;

while(i>0 && j>0){

if(s1[i-1]==s2[j-1]){

res.push\_back(s1[i-1]);

i--;

j--;

}

else{

if(dp[i-1][j]>dp[i][j-1]){

res.push\_back(s1[i-1]);

i--;

}

else{

res.push\_back(s2[j-1]);

j--;

}

}

}

while(i>0){

res.push\_back(s1[i-1]);

i--;

}

while(j>0){

res.push\_back(s2[j-1]);

j--;

}

reverse(res.begin(),res.end());

return res;

}