# Minimum Edit distance

```c
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

int min(int a, int b)
{
   return a < b? a: b;
}

int minimum(int a, int b, int c)
{
   return min(min(a, b), c);
}

int minEditDistance(char *str1, char *str2, int len1, int len2)
{
   int ED[len1+1][len2+1];
   for(int i = 0; i <= len1; i++)
   {
      for(int j = 0; j <= len2; j++)
      {
         if(i == 0)
            ED[i][j] = j;
         else if(j == 0)
            ED[i][j] = i;
         else if(str1[i-1] == str2[j-1])
            ED[i][j] = ED[i-1][j-1];
         else
            ED[i][j] = 1 + minimum(ED[i][j-1], ED[i-1][j], ED[i-1][j-1]);
      }
   }
   return ED[len1][len2];
}

int main()
{
   char str1[] = "abcdef";
   char str2[] = "azced";
   printf("Mininum edit distance = %d",
      minEditDistance(str1, str2, strlen(str1), strlen(str2)));
   return 0;
}
```

Time complexity: O(m*n)
Space complexity: O(m*n)