MILESTONE - 1 CP BASIC

1. Jewels and Stones

```
class Solution {
  public:
  int numJewelsInStones(string j ,string s) {
    int n = j.size(),m=s.size();
    int i,count=0;
    map<char,bool> mp;
    for(i=0;i<n;i++)
    {
        mp[j[i]] = true;
    }
    for(i=0;i<m;i++)
    {
        if(mp[s[i]])
        count++;
    }
    return count;
}</pre>
```

```
i C++
                 Autocomplete
   1 •
        class Solution {
   2
            public:
            int numJewelsInStones(string j ,string s) {
   3 ▼
   4
                int n = j.size(),m=s.size();
   5
                int i,count=0;
   6
                map<char,bool> mp;
   7
                for(i=0;i<n;i++)
   8 🔻
  9
                     mp[j[i]] = true;
  10
                for(i=0;i<m;i++)</pre>
  11
 12 v
 13
                     if(mp[s[i]])
 14
                     count++;
 15
                }
 16
                return count;
 17
 18
       };
Testcase
         Run Code Result
                         Debugger 🔒
 Accepted
              Runtime: 0 ms
                "aA"
 Your input
                "aAAbbbb"
                3
 Output
                3
 Expected
```

2. Merge string alternatively

```
class Solution {
    public:
string mergeAlternately(string word1, string word2) {
    string result;
    for (int i = 0; i < size(word1) || i < size(word2); ++i) {
        if (i < size(word1)) {
            result.push_back(word1[i]);
        }
        if (i < size(word2)) {
            result.push_back(word2[i]);
        }
    }
    return result;
}</pre>
```

```
i {} 5
i C++

    Autocomplete

        class Solution {
   1 *
   2
        public:
   3 ▼
            string mergeAlternately(string word1, string word2) {
   4
                 string result;
   5 🔻
                 for (int i = 0; i < size(word1) || i < size(word2); ++i) {</pre>
   6 ▼
                     if (i < size(word1)) {
   7
                         result.push_back(word1[i]);
   8
                     if (i < size(word2)) {</pre>
  9 ▼
  10
                         result.push_back(word2[i]);
  11
  12
  13
                 return result;
  14
  15
       };
Testcase
         Run Code Result
                         Debugger 🔒
 Accepted
              Runtime: 0 ms
                "abc"
 Your input
                 "pqr"
                 "apbqcr"
 Output
                 "apbqcr"
 Expected
```

3. Minimum number of steps to make two strings anagram

```
class Solution
public:
   int minSteps(string s, string t)
   {
     int arr1[26] = \{0\};
     int arr2[26] = \{0\};
     int n = s.size();
     for (int i = 0; i < n; ++i)
        ++arr1[s[i] - 'a'];
        ++arr2[t[i] - 'a'];
     }
     int ans = 0;
     for (int i = 0; i < 26; ++i)
     {
        if (arr1[i] > arr2[i])
           ans += (arr1[i] - arr2[i]);
     }
     return ans;
  }
};
```

```
i C++ ▼
                                                                                 i {}

    Autocomplete

  1
       class Solution
  2 🔻
  3
       public:
  4
           int minSteps(string s, string t)
  5 🔻
               int arr1[26] = {0};
  6
  7
               int arr2[26] = \{0\};
  8
               int n = s.size();
               for (int i = 0; i < n; ++i)
  9
  10 ▼
 11
                   ++arr1[s[i] - 'a'];
                   ++arr2[t[i] - 'a'];
 12
 13
 14
               int ans = 0;
 15
               for (int i = 0; i < 26; ++i)
 16 ▼
 17
                   if (arr1[i] > arr2[i])
 18
                       ans += (arr1[i] - arr2[i]);
 19
 20
               return ans;
 21
 22
      };
        Run Code Result Debugger 🔒
Testcase
 Accepted
             Runtime: 0 ms
               "bab"
 Your input
               "aba"
               1
 Output
               1
 Expected
```

4. Spiral Matrix

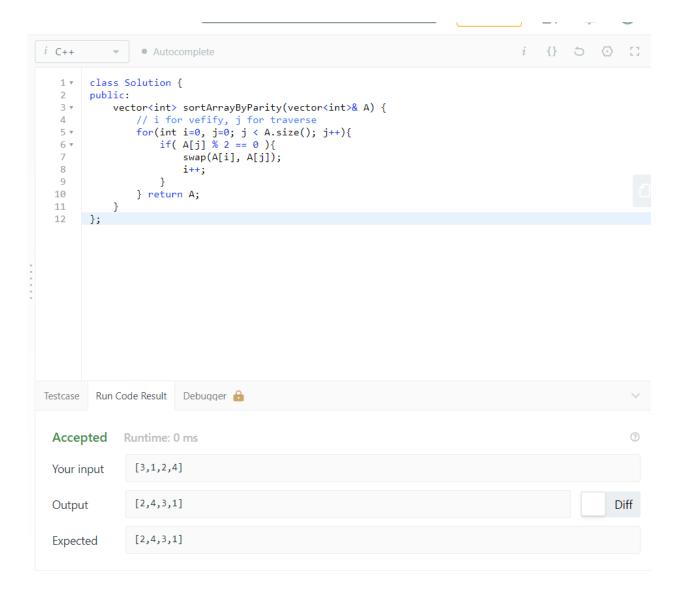
```
class Solution {
public:
  vector<int> spiralOrder(vector<vector<int>>& matrix) {
     int m = matrix.size(), n = m ? matrix[0].size() : 0, u = 0, d = m - 1, l = 0,
r = n - 1, p = 0;
     vector<int> order(m * n);
     while (u \le d \& l \le r) \{
        for (int col = I; col <= r; col++) {
           order[p++] = matrix[u][col];
        }
        if (++u > d) {
           break;
        for (int row = u; row <= d; row++) {
           order[p++] = matrix[row][r];
        if (--r < I) {
           break;
        for (int col = r; col >= l; col--) {
           order[p++] = matrix[d][col];
        }
        if (--d < u) {
           break;
        for (int row = d; row \Rightarrow u; row--) {
           order[p++] = matrix[row][l];
        if (1++ > r) {
           break;
        }
```

```
}
       return order;
};
 i C++

    Autocomplete

                                                                                      i {} 5 ⊕ □
    1 •
         class Solution {
    2
         public:
             vector<int> spiralOrder(vector<vector<int>>& matrix) {
    3 ▼
                  int m = matrix.size(), n = m ? matrix[0].size() : 0, u = 0, d = m - 1, l = 0, r = n -
    4
         1, p = 0;
    5
                  vector<int> order(m * n);
                  while (u <= d && 1 <= r) {
    6 ▼
    7 🔻
                      for (int col = 1; col <= r; col++) {
    8
                          order[p++] = matrix[u][col];
    9
   10 🔻
                      if (++u > d) {
   11
                          break;
   12
   13 ▼
                      for (int row = u; row <= d; row++) {
   14
                          order[p++] = matrix[row][r];
   15
   16 v
                      if (--r < 1) {
   17
                          break;
   18
   19 ▼
                      for (int col = r; col >= l; col--) {
                          order[p++] = matrix[d][col];
   20
   21
   Your previous code was restored from your local storage. Reset to default
  Testcase Run Code Result Debugger
   Accepted
                Runtime: 0 ms
                                                                                                         3
                 [[1,2,3],[4,5,6],[7,8,9]]
   Your input
                  [1,2,3,6,9,8,7,4,5]
                                                                                                       Diff
   Output
                 [1,2,3,6,9,8,7,4,5]
   Expected
```

5. Sort array by parity



6. Best time to buy and sell stock

```
class Solution {
public:
  int maxProfit(vector<int>& prices) {
    if(prices.size() == 0) return 0;

  int ans = 0;

  int start = prices[0], end = prices[0];

  for(int i = 0; i < prices.size(); i++){</pre>
```

```
if(prices[i] < start){
    //restart as session
    ans = max(ans, end - start);
    start = prices[i];
    end = prices[i];
}else{
    //continue current session
    end = max(end, prices[i]);
}

ans = max(ans, end - start);
return ans;
}
</pre>
```

```
i C++

    Autocomplete

        class Solution {
   2
        public:
   3 ▼
             int maxProfit(vector<int>& prices) {
                 if(prices.size() == 0) return 0;
                 int ans = 0;
   8
                 int start = prices[0], end = prices[0];
   9
  10 ▼
                 for(int i = 0; i < prices.size(); i++){</pre>
  11 ▼
                     if(prices[i] < start){</pre>
  12
                          //restart as session
  13
                          ans = max(ans, end - start);
 14
                          start = prices[i];
 15
                          end = prices[i];
 16 ▼
                     }else{
 17
                          //continue current session
 18
                          end = max(end, prices[i]);
 19
                     }
  20
                 }
  21
                 ans = max(ans, end - start);
                 return ans;
 Your previous code was restored from your local storage. Reset to default
Testcase
         Run Code Result
                        Debugger 🔒
 Accepted
               Runtime: 5 ms
                 [7,1,5,3,6,4]
 Your input
                 5
 Output
                 5
 Expected
```

7. Best time to buy and sell stock -ii

```
class Solution {
public:
   int maxProfit(vector<int>& prices) {
    int mp = 0;
   for(int i =1; i<prices.size(); i++)</pre>
```

```
{
    if(prices[i] > prices[i-1])
    {
       mp += prices[i]-prices[i-1];
    }
    return mp;
}
```

```
i C++

    Autocomplete

         class Solution {
   1 ▼
         public:
   2
   3 ▼
             int maxProfit(vector<int>& prices) {
   4
                  int mp = 0;
   5
   6
                 for(int i =1; i<prices.size(); i++)</pre>
   7
   8 🔻
                      if(prices[i] > prices[i-1])
   9
  10 v
                          mp += prices[i]-prices[i-1];
  11
  12
  13
  14
                 return mp;
  15
             }
        };
  16
          Run Code Result
Testcase
                          Debugger 🔒
 Accepted
               Runtime: 3 ms
                 [7,1,5,3,6,4]
 Your input
 Output
                 7
 Expected
```

LeetCode id: https://leetcode.com/kashish_1129/