# Evaluation Rubric :

|  |  |  |
| --- | --- | --- |
| **Evaluation parameter** | **Does not meet specifications** | **Meets specifications** |
| **Problem statement** |  | **2** |
| Problem Statement must be clearly defined |  | **√** |
| Expected input and output formats must be described |  | **√** |
| Explain the problem statement with an example(if applicable) |  | **√** |
| **Expected input & output** |  | **3** |
| Minimum of 5 test cases (if applicable) |  | **√** |
| Coverage |  | **√** |
| Border condition |  | **√** |
| Unexpected inputs |  | **√** |
| **Solution** |  |  |
| The correctness of the solution. |  |  |
| Check for all the elements (tokens) of the problem (Assignment, Arithmetic, conditional, relational, input, output etc) |  |  |
| **Trace Table :** |  |  |
| Columns are variables, conditions, print statements |  |  |
| Order |  |  |
| Trace table for each function(If applicable) |  |  |
| labeling the columns |  |  |
| Coverage (conditions, iterations... etc) |  |  |
| **Final Result** |  |  |
| Executable File Submission |  |  |
| **Executable File** |  |  |
| Check with all test cases |  |  |

# 

**Problem Statement**: **(2 Marks)**

Given a string, shuffle or rearrange every alternative character.

**Test cases: (3 Marks)**

|  |  |
| --- | --- |
| **Expected Input** | **Expected Output** |
| abcd | badc |
| aabb | aabb |
| Abc | bAcX |
| A!bc | bAcX |
| abcde | badce |

**Solution**: **(5 Marks)**

**Step 1:** START

Step 2: Input String a

Step 3: Convert String to Tocharacters(a)

Step 4: d= Length(a)

Strp 5: While(d%2=1) true=5.2, false=step 6

Step 5.1: a=a+’X’

Step 5.2: Output a

Step 6: i=i+1

Step 7: Output a

**Psedocode:**

**START**

**QUERY 'Enter a', a**

**a=TOCHARACTERS(a)**

**i=0**

**d=LENGTH(a)**

**WRITE "a is : ",a, " "**

**IF d%2=1 THEN**

**a=a+'X'**

**WRITE 'length=odd',a**

**ENDIF**

**i=i+1**

**WRITE a[i+1],a[i],a[i+3],a[i+2],a[i+5],a[i+4]**

**END**

**Trace Table** : **(5 Marks)**

**Final Result :** **(2 Marks)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Expected input** | **Expected output** | **Actual output** | **Test result** |
|  |  |  |  |