**Test Reference:**

|  |  |
| --- | --- |
| /\* |  |
|  | \* Checks if new score is better than old score Updates as required |
|  | \*/ |

**Equivalent Classes:**

|  |  |  |
| --- | --- | --- |
|  | **Valid** | **Invalid** |
| **tname** | * **1.1 -** “gold” literal * **1.2 -** “green” literal * **1.3** - “GOld” mix of upper and lowercase letters * **1.4** - “GrEen” mix of upper and lowercase letters * **1.5** - “GOLD” literal * **1.6** - “GREEN” literal | * **1.a -** null * **1.b -** empty string * **1.c -** string with 1 character * **1.d -** integer type |
| **word** | * **2.1 -** string composed of permissible characters that abides by the length requirements * **2.2 -** uppercase word | * **2.a -** non-encoded characters * **2.b -** empty string * **2.c -** single char * **2.d -** integer type * **2.e -** >11 lettered word * **2.f -** null |

**Class Representatives:**

|  |  |
| --- | --- |
| Equivalence Class | Representative |
| 1.1 | “gold” |
| 1.2 | “green” |
| 1.3 | “GoLd” |
| 1.4 | “GreeN” |
| 1.5 | “GOLD” |
| 1.6 | “GREEN” |
| 1.a | null |
| 1.b | “” |
| 1.c | “c” |
| 1.d | 79 |
| 2.1 | “cat” |
| 2.2 | “DOG” |
| 2.a | “典Josephus” |
| 2.b | “” |
| 2.c | “a” |
| 2.d | 78 |
| 2.e | “JosephusJosephus” |
| 2.f | null |

**Representative Boundaries:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Equiv. Class** | **Representative** | **Lower Boundary** | **Upper Boundary** |
| 1.1 | “gold” | “gol” | “goldd” |
| 1.2 | “green” | “gree” | “greenn” |
| 1.3 | “GoLd” | “goL” | “goLdd” |
| 1.4 | “GreeN” | “GreE” | “GreEnn” |
| 1.5 | “GOLD” | “GOL” | “GOLDD” |
| 1.6 | “GREEN” | “GREE” | “GREENN” |
| 1.a | null | - | - |
| 1.b | “” | - | “c” |
| 1.c | “c” | “” | “cc” |
| 1.d | 79 | 78 | 80 |
| 2.1 | “cat” | “ca” | “catt” |
| 2.2 | “DOG” | “DO” | “DOGG” |
| 2.a | “典Josephus” | “典Josephu” | “典Josephuss” |
| 2.b | “” | - | “a” |
| 2.c | “a” | “” | “aa” |
| 2.d | 78 | 77 | 79 |
| 2.e | “JosephusJosephus” | “JosephusJosephu” | “JosephusJosephuss” |
| 2.f | null | - | - |

**Test Cases:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test ID** | **tname** | **points** | **Eq. Class** | **Expected Output** |
| t\_0 | “gold” | “cat” | 1.1, 2.1 |  |
| t\_1 | “green” | “DOG” | 1.2, 2.2 |  |
| t\_2 | “GoLd” | “DO” | 1.3, 2.2 |  |
| t\_3 | “GreeN” | “DOG” | 1.4, 2.2 |  |
| t\_4 | “GOLD” | “DOG” | 1.5, 2.2 |  |
| t\_5 | “GREEN” | “DOG” | 1.6 |  |
| t\_6 | null | “cat” | 1.a | ERROR |
| t\_7 | “” | “cat” | 1.b | ERROR |
| t\_8 | “c” | “cat” | 1.c | ERROR |
| t\_9 | 79 | “cat” | 1.d | ERROR |
| t\_10 | “GOLD” | “典Josephus” | 2.a | ERROR |
| t\_11 | “GOLD” | “” | 2.b | ERROR |
| t\_12 | “GOLD” | “a” | 2.c | ERROR |
| t\_13 | “GOLD” | 78 | 2.d | ERROR |
| t\_14 | “GOLD” | “JosephusJosephus” | 2.e | ERROR |
| t\_15 | “GOLD” | null | 2.f | ERROR |
| t\_16 | “gol” | “cat” | 1.1 |  |
| t\_17 | “goldd” | “cat” | 1.1 |  |
| t\_18 | “gree” | “cat” | 1.2 |  |
| t\_19 | “greenn” | “cat” | 1.2 |  |
| t\_20 | “goL” | “cat” | 1.3 |  |
| t\_21 | “goLdd” | “cat” | 1.3 |  |
| t\_22 | “GreE” | “cat” | 1.4 |  |
| t\_23 | “GreEnn” | “cat” | 1.4 |  |
| t\_24 | “GOL” | “cat” | 1.5 |  |
| t\_25 | “GOLDD” | “cat” | 1.5 |  |
| t\_26 | “GREE” | “cat” | 1.6 |  |
| t\_27 | “GREENN” | “cat” | 1.6 |  |
| t\_28 | “cc” | “cat” | 1.c | ERROR |
| t\_29 | 78 | “cat” | 1.d | ERROR |
| t\_30 | 80 | “cat” | 1.d | ERROR |
| t\_31 | “GOLD” | “ca” | 2.1 |  |
| t\_32 | “GOLD” | “catt” | 2.1 |  |
| t\_33 | “GOLD” | “DO” | 2.2 |  |
| t\_34 | “GOLD” | “DOGG” | 2.2 |  |
| t\_35 | “GOLD” | “典Josephu” | 2.a | ERROR |
| t\_36 | “GOLD” | “典Josephuss” | 2.a | ERROR |
| t\_37 | “GOLD” | “aa” | 2.c | ERROR |
| t\_38 | “GOLD” | 77 | 2.d | ERROR |
| t\_39 | “GOLD” | 79 | 2.d | ERROR |
| t\_40 | “GOLD” | “JosephusJosephu” | 2.e | ERROR |
| t\_41 | “GOLD” | “JosephusJosephuss” | 2.e | ERROR |