|  |  |
| --- | --- |
| /\*\* |  |
|  | \* Add a new game table to the database |
|  | \* @param game\_id The game id |
|  | \* @param gold\_team\_score final Gold team score as an integer |
|  | \* @param green\_team\_score final Green team score as an integer |
|  | \*/ |

**Equivalent Classes:**

|  |  |  |
| --- | --- | --- |
|  | **Valid** | **Invalid** |
| **game\_id** | * **1.1** - 1 * **1.2** - {x | x > 0 and x < 2147483647 } * **1.3** - 2147483647 * **1.4** - 0 | * **1.a -** null * **1.b -**  {x | x < 0 and x > -2147483648 } * **1.c -** -1 * **1.d -**  -2147483648 |
| **gold\_team\_score** | * **2.1** - 1 * **2.2** - {x | x > 0 and x < 2147483647 } * **2.3** - 2147483647 * **2.4 - 0** | * **2.a -** null * **2.b -**  {x | x < 0 and x > -2147483648 } * **2.c -** -1 * **2.d -**  -2147483648 |
| **green\_team\_score** | * **3.1** - 1 * **3.2** - {x | x > 0 and x < 2147483647 } * **3.3** - 2147483647 * **3.4 -** 0 | * **3.a -** null * **3.b -**  {x | x < 0 and x > -2147483648 } * **3.c -** -1 * **3.d -**  -2147483648 |

**Class Representatives:**

|  |  |
| --- | --- |
| Equivalence Class | Representative |
| 1.1 | 1 |
| 1.2 | 33 |
| 1.3 | 2147483647 |
| 1.4 | 0 |
| 1.a | null |
| 1.b | -33 |
| 1.c | -1 |
| 1.d | -2147483648 |
| 2.1 | 1 |
| 2.2 | 40 |
| 2.3 | 2147483647 |
| 2.4 | 0 |
| 2.a | null |
| 2.b | -40 |
| 2.c | -1 |
| 2.d | -2147483648 |
| 3.1 | 1 |
| 3.2 | 40 |
| 3.3 | 2147483647 |
| 3.4 | 0 |
| 3.a | null |
| 3.b | -40 |
| 3.c | -1 |
| 3.d | -2147483648 |

**Representative Boundaries:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Equiv. Class** | **Representative** | **Lower Boundary** | **Upper Boundary** |
| 1.1 | 1 | 0 | 2 |
| 1.2 | 33 | 32 | 34 |
| 1.3 | 2147483647 | 2147483646 | 2147483648 |
| 1.4 | 0 | -1 | 1 |
| 1.a | null | - | - |
| 1.b | -33 | -34 | -32 |
| 1.c | -1 | -2 | 0 |
| 1.d | -2147483648 | -2147483649 | -2147483647 |
| 2.1 | 1 | 0 | 2 |
| 2.2 | 40 | 39 | 41 |
| 2.3 | 2147483647 | 2147483646 | 2147483648 |
| 2.4 | 0 | -1 | 1 |
| 2.a | null | - | - |
| 2.b | -40 | -41 | -39 |
| 2.c | -1 | -2 | 0 |
| 2.d | -2147483648 | -2147483649 | -2147483647 |
| 3.1 | 1 | 0 | 2 |
| 3.2 | 40 | 39 | 41 |
| 3.3 | 2147483647 | 2147483646 | 2147483648 |
| 3.4 | 0 | -1 | 1 |
| 3.a | null | - | - |
| 3.b | -40 | -41 | -39 |
| 3.c | -1 | -2 | 0 |
| 3.d | -2147483648 | -2147483649 | -2147483647 |

**Test Cases:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test ID** | **game\_id** | **gold\_team\_score** | **green\_team\_score** | **Eq. Class** | **Expected Output** |
| t\_0 | 1 | 1 | 1 | 1.1, 2.1, 3.1 |  |
| t\_1 | 33 | 40 | 40 | 1.2, 2.2, 3.2 |  |
| t\_2 | 2147483647 | 2147483647 | 2147483647 | 1.3, 2.3, 3.3 |  |
| t\_3 | 0 | 0 | 0 | 1.4, 2.4, 3.4 |  |
| t\_4 | null | 10 | 10 | 1.a | ERROR |
| t\_5 | -33 | 11 | 11 | 1.b | ERROR |
| t\_6 | -1 | 12 | 12 | 1.c | ERROR |
| t\_7 | -2147483648 | 13 | 13 | 1.d | ERROR |
| t\_8 | 10 | null | 10 | 2.a | ERROR |
| t\_9 | 11 | -40 | 11 | 2.b | ERROR |
| t\_10 | 12 | -1 | 12 | 2.c | ERROR |
| t\_11 | 11 | -2147483648 | 11 | 2.d | ERROR |
| t\_12 | 10 | 10 | null | 3.a | ERROR |
| t\_13 | 11 | 11 | -40 | 3.b | ERROR |
| t\_14 | 12 | 12 | -1 | 3.c | ERROR |
| t\_15 | 11 | 11 | -2147483648 | 3.d | ERROR |
| t\_16 | 2 | 1 | 1 | 1.1 |  |
| t\_17 | 32 | 40 | 40 | 1.2 |  |
| t\_18 | 34 | 2147483647 | 2147483647 | 1.2 |  |
| t\_19 | 2147483646 | 0 | 0 | 1.3 |  |
| t\_20 | 2147483648 | 1 | 1 | 1.3 |  |
| t\_21 | -34 | 10 | 10 | 1.b | ERROR |
| t\_22 | -32 | 11 | 11 | 1.b | ERROR |
| t\_23 | -2 | 12 | 12 | 1.c | ERROR |
| t\_24 | -2147483649 | 11 | 11 | 1.d | ERROR |
| t\_25 | -2147483647 | 10 | 10 | 1.d | ERROR |
| t\_26 | 11 | 2 | 11 | 2.1 |  |
| t\_27 | 12 | 39 | 12 | 2.2 |  |
| t\_28 | 11 | 41 | 11 | 2.2 |  |
| t\_29 | 11 | 2147483646 | 11 | 2.3 |  |
| t\_30 | 12 | 2147483648 | 12 | 2.3 |  |
| t\_31 | 11 | -41 | 11 | 2.b | ERROR |
| t\_32 | 12 | -39 | 12 | 2.b | ERROR |
| t\_33 | 11 | -2 | 11 | 2.c | ERROR |
| t\_34 | 11 | -2147483649 | 11 | 2.d | ERROR |
| t\_35 | 12 | -2147483647 | 12 | 2.d | ERROR |
| t\_36 | 11 | 11 | 2 | 3.1 |  |
| t\_37 | 11 | 12 | 39 | 3.2 |  |
| t\_38 | 12 | 11 | 41 | 3.2 |  |
| t\_39 | 11 | 11 | 2147483646 | 3.3 |  |
| t\_40 | 11 | 12 | 2147483648 | 3.3 |  |
| t\_41 | 11 | 11 | -41 | 3.b | ERROR |
| t\_42 | 11 | 12 | -39 | 3.b | ERROR |
| t\_43 | 12 | 11 | -2 | 3.c | ERROR |
| t\_44 | 11 | 11 | -2147483649 | 3.d | ERROR |
| t\_45 | 11 | 12 | -2147483647 | 3.d | ERROR |