1. Date

| **Test Case #** | **Date (MM/DD/YYYY)** | **Expected Output** | **Reasoning** |
| --- | --- | --- | --- |
| **1 (Invalid)** | 02/29/2023 | false | not a leap year |
| **2 (Invalid)** | 04/31/2023 | false | only 30 days |
| **3 (Invalid)** | 13/10/2023 | false | no 13th month |
| **4 (Invalid)** | 00/15/2023 | false | month cannot be zero |
| **5 (Valid)** | 12/31/2023 | true | normal day |
| **6 (Valid)** | 02/29/2024 | true | is a leap year |

1. Profile

| **Test Case #** | **Profile 1 (Last, First, DOB)** | **Profile 2 (Last, First, DOB)** | **Expected Output** | **Reasoning** |
| --- | --- | --- | --- | --- |

| **1 (-1)** | "Adams, John, 01/15/2000" | "Brown, Alice, 02/20/1998" | -1 | "Adams" comes before "Brown". |
| --- | --- | --- | --- | --- |

| **2 (-1)** | "Smith, Alice, 03/10/1995" | "Smith, John, 06/15/1995" | -1 | Same last name, but "Alice" comes before "John". |
| --- | --- | --- | --- | --- |

| **3 (-1)** | "Johnson, Mark, 05/30/1990" | "Johnson, Mark, 06/25/1992" | -1 | Same last and first name, but earlier birth date. |
| --- | --- | --- | --- | --- |

| **4 (1)** | "Brown, Alice, 02/20/1998" | "Adams, John, 01/15/2000" | 1 | "Brown" comes after "Adams". |
| --- | --- | --- | --- | --- |

| **5 (1)** | "Smith, John, 06/15/1995" | "Smith, Alice, 03/10/1995" | 1 | Same last name, but "John" comes after "Alice". |
| --- | --- | --- | --- | --- |

| **6 (1)** | "Johnson, Mark, 06/25/1992" | "Johnson, Mark, 05/30/1990" | 1 | Same last and first name, but later birth date. |
| --- | --- | --- | --- | --- |

| **7 (0)** | "Taylor, Chris, 04/04/1999" | "Taylor, Chris, 04/04/1999" | 0 | Both profiles are exactly the same. |
| --- | --- | --- | --- | --- |