Part 1:

1. The function which.max() has one parameter, which serves as its input, a sequence of numbers to be analyzed.

2. The function which.max() identifies and returns the index position of the largest value contained in the argument passed.

3. Example:

    Input: which.max(c(3,-1,4,2.5))
    Output: [1] 3

4. If there is a tie, which.max() returns the index position of only the first largest number, even if the same number is repeated later in the sequence. I figured this out by intentionally creating a vector with a repeated maximum value then calling the which.max function.

Part 2:

1. The dataset's type is a list, and its class is data.frame.

    ```
    x = readRDS("mystery.rds")
    typeof(x)
    class(x)
    ```

2. The data contains 17 columns and 2456 rows. In other words, the data contains 2456 instances of 17 variables. The dataset’s file size is 55 KB.

    ```
    x = readRDS("mystery.rds")
    dim(x)
    ```

3. Five columns include information about passengers’ last names, first names, survival status (true / false), gender (male / female), age (in days), and job description.

    ```
    head(x)
    ```

4. The data clearly represents an inventory of a ship's passengers. My initial guess is that the data is a listing of all registered passengers on the Titanic, as "survived" is a column heading - suggesting that a major accident occurred on the ship.

5. Online research confirms my initial hypothesis that this dataset relates to the Titanic.

6. The dataset does not include information on passengers' marital status. Such information would be highly relevant for legal officials tasked with notifying the next of kin for the individuals who did not survive the ship's demise. Since this information is not included, the process of locating potential next of kin would be much more complex, arduous, and time consuming, especially considering the sheer number of people involved and affected. Another variable not included in this dataset is whether the passengers were travelling alone, in a group, or with family members. Having this data would similarly be useful for establishing context for each passenger and determining the best course of action for notifying close relatives and dependents if necessary.

7. This data set seems well-intentioned and somewhat accurate, meaning that it is not intentionally distorted or manipulated to hide the true story of the raw data. Nevertheless, I am not fully convinced that it describes the entire reality of the situation. For example, individuals never found after the crash may be counted as deceased, even though this assumption is not necessarily true. In addition, people who were present on the ship but not officially registered as a passenger could also be unaccounted for in this dataset.