**DATA SCIENCE**

**STATISTICS**

**ASSIGNMENT-1**

**EXERCISE 1.**At what level are each of the following variables operationalized?

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Variable Name** | **Value Labels** | **Data Type** |
| 1 | Age | 1, 2, 3, .... | Continuous |
| 2 | Sex | male, female, other | Nominal |
| 3 | Class standing | freshman, sophomore, junior, senior | Ordinal |
| 4 | Marital Status | married, single, divorced, widowed | Nominal |
| 5 | Median Household Income | annual household income in dollars | Continuous |
| 6 | How much you like the food on campus? | a lot, some, a little, other | Ordinal |
| 7 | The number of toxic waste sites in your community | 0, 1, 2, 3, .... | Discrete |
| 8 | The number of toxic waste sites in your community | 0, 1–5, 6–10, 11+ | Discrete |
| 9 | Your GPA | below average, average, above average | Ordinal |

**EXERCISE 2.**Go to the National Opinion Research Center’s 2008 General Social Survey Codebook at [http://sda.berkeley.edu/ HYPERLINK "https://sda.berkeley.edu/D3/GSS08/Doc/gs08.htm"D3/GSS08/Doc/gs08.htm](https://sda.berkeley.edu/D3/GSS08/Doc/gs08.htm). What is the level of measurement (nominal, ordinal, or interval/ratio) for the following variables?

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable Name** | **Level of Measurement** | **Variable Name** | **Level of Measurement** |
| ABLEGAL | Ordinal | MUSICALS | Ordinal |
| ACQVABLK | Ordinal | MAYRDIED | Ratio |
| ACTLIT | Nominal | NATBORN | Ratio |
| ADULTS | Ordinal | NUMKIDS | Ratio |
| ADVFAM | Nominal | PAAEDUC | Ordinal |
| AGE | Ratio | PAINCURE | Ordinal |
| BIBLE | Nominal | POLVIEWS | Ordinal |
| BLKZONE | Ordinal | RACE | Nominal |
| CARSGEN | Ordinal | SEX | Nominal |
| CONROCK | Ordinal | TRUST | Ordinal |