**Principles of Data Science**

**Justification For Question A**

The code uses a basic imputation approach to handle missing data. For numeric columns, replacing missing values with the mean might be fair if the data distribution is somewhat normal and the missing values are not too many. Similarly, using the mode to fill missing values in categorical columns is a frequent method that may be effective when working with categorical data. In-place adjustments are made using the fillna () function and the inplace=True option. This guarantees that any missing values are put directly into the Data Frame df, eliminating the need for reassignment. The code handles missing values effectively by filling them in bulk for each column rather than iterating over each row separately. The code is reasonably simple to comprehend and follows a clear logic flow, making it straightforward to maintain and adapt as needed.