**Principles of Data Science**

**Justification For Question A**

To deal with missing data the code uses a basic imputation approach.

For numeric columns, replacing missing values with the mean may be appropriate if the data distribution is reasonably normal and the missing values are not excessive.

Similarly, using the mode to fill missing values in categorical columns is a frequent method that may be effective when working with categorical data. The fillna () function is used to make in-place modifications, along with the inplace=True parameter.

This ensures that any missing data is promptly loaded into the Data Frame df, removing the need for reassignment. The code efficiently handles missing values by filling them in bulk for each column rather than iterating over each row individually.

The code is reasonably simple to comprehend and follows a clear logic flow, making it straightforward to maintain and adapt as needed.