## Sack to report

| Step       | Code start | Code end | Start df name      | End df name         | Before shape | After shape | Study part |
|------------|------------|----------|--------------------|---------------------|--------------|-------------|------------|
| Data load  | 62         | 83       | NA                 | data                | 0-0          | 1259-27     | #2.1.3     |
| >20% MV    | 84         | 88       | data               | data                | 1259-27      | 1259-24     | #2.2.2     |
| NMAR       | 89         | 92       | data               | data                | 1259-24      | 1241-24     | #2.2.2     |
| Dom know   | 93         | 96       | data               | data                | 1241-24      | 1241-21     | #2.2.3     |
| ValCap     | 97         | 115      | data               | data                | 1241-21      | 1233-21     | #2.2.4     |
| HighCard   | 116        | 188      | data               | data                | 1233-21      | 1233-21     | #2.2.5     |
| Cramér's   | 189        | 285      | data               | data                | 1233-21      | 1233-16     | #2.3       |
| 1HE        | 286        | 320      | data               | data_encoded_float  | 1233-16      | 1233-41     | #2.4.1     |
| RobSca_1   | 321        | 333      | data_encoded_float | scaled_data         | 1233-41      | 1233-41     | #2.4.2     |
| VT()       | 334        | 360      | scaled_data        | data_VT             | 1233-41      | 1233-38     | #2.5.1     |
| Spearman   | 361        | 426      | data_VT            | data_corr_final     | 1233-38      | 1233-27     | #2.5.2     |
| MDS        | 427        | 500      | data_corr_final    | MDS_clean_data      | 1233-27      | 1228-23     | #2.6.1     |
| LLE        | 501        | 584      | MDS_clean_data     | LLEed_data          | 1228-23      | ~1160-23    | #2.6.2     |
| DFS        | 585        | 694      | LLEed_data         | data_dfs_scaled     | ~1160-23     | ~1160-157   | #2.6.3     |
| Feat Imp   | 695        | 797      | data_dfs_scaled    | filtered_data       | ~1160-157    | ~1160-7     | #2.6.4     |
| Clustering | 798        | END      | filtered_data      | data_with_HDBSCAN_2 | ~1160-7      | END         | #2.7       |