

Lab 2

The `titanic` dataset contains data on 887 Titanic passengers, including each passenger's survival status, embarkation location, cabin class, and sex. Write a program that performs the following tasks:

- Load the dataset in `titanic.csv` as `titanic`.
- Create a new data frame, `firstSouth`, by subsetting `titanic` to include instances where a passenger is in the first class cabin (`pclass` feature is 1) and boarded from Southampton (`embarked` feature is S).
- Create a new data frame, `secondThird`, by subsetting `titanic` to include instances where a passenger is either in the second (`pclass` feature is 2) or third class (`pclass` feature is 3) cabin.
- Create bar charts for the following:
 - Passengers in first class who embarked in Southampton grouped by sex
 - Passengers in second and third class grouped by survival status

The output should be (could differ slightly but would be almost similar):

```
   survived  pclass    sex   age  ... deck embark_town  alive  alone
3         1      1  female  35.0  ...   C  Southampton   yes  False
6         0      1   male  54.0  ...   E  Southampton   no   True
11        1      1  female  58.0  ...   C  Southampton   yes   True
23        1      1   male  28.0  ...   A  Southampton   yes   True
27        0      1   male  19.0  ...   C  Southampton   no  False
```

```
[5 rows x 15 columns]
```

```
   survived  pclass    sex   age  ... deck embark_town  alive  alone
0         0      3   male  22.0  ...  NaN  Southampton   no  False
2         1      3  female  26.0  ...  NaN  Southampton   yes   True
4         0      3   male  35.0  ...  NaN  Southampton   no   True
5         0      3   male   NaN  ...  NaN   Queenstown   no   True
7         0      3   male   2.0  ...  NaN  Southampton   no  False
```

```
[5 rows x 15 columns]
```

```
[5 rows x 15 columns]
```

