**Allen Taylor**

**SDEV 300 6382 LAB 3**

**1/31/2022**

**Main Menu**

**Test Case 1:**

Input validation

**Requirements:**

Must contain input validation.

**Input:**

Error Check, -100, 6, 5

**Expected Output:**

\*\*\* Invalid Selection \*\*\*

**Actual Output:**

\*\*\* Invalid Selection \*\*\*

Text

Description automatically generated

**Display all U.S. States in Alphabetical order along with the Capital, State Population, and Flower**

**Test Case 1:**

Display all U.S. States in Alphabetical order along with the Capital, State Population, and Flower.

**Requirements:**

Display all state data in alphabetical order.

**Input:**

1, 6

**Expected Output:**

State data is displayed in alphabetical order.

**Actual Output:**

State data is displayed in alphabetical order.

Text

Description automatically generated

**Search for a specific state and display the appropriate Capital name, State Population, and an image of the associated State Flower.**

**Test Case 1:**

Search for a specific state and display the appropriate Capital name, State Population, and an image of the associated State Flower.

**Requirements:**

Displayed specified state data and display an image of its flower.

**Input:**

2, New York

**Expected Output:**

State data and image are displayed.

**Actual Output:**

State data and image are displayed.

Text

Description automatically generated

**Test Case 2:**

Input validation and normalization.

**Requirements:**

Must contain input validation and normalization.

**Input:**

New Fork, nEw yOrK, 12345, 5

**Expected Output:**

All invalid inputs are caught and handled. “nEw yOrK” is a valid input.

**Actual Output:**

All invalid inputs are caught and handled. “nEw yOrK” is a valid input.

Graphical user interface, text

Description automatically generated

**Provide a Bar graph of the top 5 populated States showing their overall population.**

**Test Case 1:**

Provide a bar graph of the top 5 populated States showing their overall population.

**Requirements:**

Display a bar graph with top 5 populations.

**Input:**

3

**Expected Output:**

Bar graph with top 5 populated states.

**Actual Output:**

Bar graph with top 5 populated states.

Chart, bar chart

Description automatically generated

**Update the overall state population for a specific state.**

**Test Case 1:**

Update population for specific state.

**Requirements:**

Update population, change should reflect on bar chart.

**Input:**

4, new york, 80\_000\_000

**Expected Output:**

Population for New York is changed to 80,000,000 and change is shown on bar chart.

**Actual Output:**

Population for New York is changed to 80,000,000 and change is shown on bar chart.

Chart, bar chart

Description automatically generated

**Test Case 2:**

Input validation

**Requirements:**

Enter invalid population

**Input:**

4, Error Check, -100, 1, 99000, 100000

**Expected Output:**

All invalid inputs are caught and handled.

**Actual Output:**

All invalid inputs are caught and handled.

Text

Description automatically generated

**Pylint Results**

**9.76/10**

**Comments:**

-Lines are too long. This is an acceptable error.

-I have too many branches in my program, but I think this is an acceptable error due to the nature of the program. User interfaces should have many choices (branches).

\*\*\*\*\*\*\*\*\*\*\*\*\* Module lab\_3

lab\_3.py:36:0: C0303: Trailing whitespace (trailing-whitespace)

lab\_3.py:52:0: C0303: Trailing whitespace (trailing-whitespace)

lab\_3.py:72:9: C0303: Trailing whitespace (trailing-whitespace)

lab\_3.py:74:0: C0303: Trailing whitespace (trailing-whitespace)

lab\_3.py:84:14: C0303: Trailing whitespace (trailing-whitespace)

lab\_3.py:125:9: C0303: Trailing whitespace (trailing-whitespace)

lab\_3.py:127:0: C0303: Trailing whitespace (trailing-whitespace)

lab\_3.py:130:0: C0301: Line too long (109/100) (line-too-long)

lab\_3.py:131:0: C0301: Line too long (141/100) (line-too-long)

lab\_3.py:148:20: C0303: Trailing whitespace (trailing-whitespace)

lab\_3.py:180:22: C0303: Trailing whitespace (trailing-whitespace)

lab\_3.py:22:14: W0621: Redefining name 'state\_data' from outer scope (line 17) (redefined-outer-name)

lab\_3.py:37:23: W0621: Redefining name 'state\_data' from outer scope (line 17) (redefined-outer-name)

lab\_3.py:53:22: W0621: Redefining name 'state\_data' from outer scope (line 17) (redefined-outer-name)

lab\_3.py:70:8: W0702: No exception type(s) specified (bare-except)

lab\_3.py:86:14: W0621: Redefining name 'state\_data' from outer scope (line 17) (redefined-outer-name)

lab\_3.py:103:4: C0103: Variable name "df" doesn't conform to snake\_case naming style (invalid-name)

lab\_3.py:113:15: W0621: Redefining name 'state\_data' from outer scope (line 17) (redefined-outer-name)

lab\_3.py:145:0: R0912: Too many branches (15/12) (too-many-branches)

lab\_3.py:18:0: C0411: third party import "import matplotlib.pyplot as plt" should be placed before "from state\_data import state\_data" (wrong-import-order)

lab\_3.py:19:0: C0411: third party import "import seaborn as sns" should be placed before "from state\_data import state\_data" (wrong-import-order)

lab\_3.py:20:0: C0411: third party import "import pandas as pd" should be placed before "from state\_data import state\_data" (wrong-import-order)

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Your code has been rated at 7.96/10

\*\*\*\*\*\*\*\*\*\*\*\*\* Module lab\_3

lab\_3.py:84:14: C0303: Trailing whitespace (trailing-whitespace)

lab\_3.py:127:0: C0303: Trailing whitespace (trailing-whitespace)

lab\_3.py:130:0: C0301: Line too long (109/100) (line-too-long)

lab\_3.py:131:0: C0301: Line too long (141/100) (line-too-long)

lab\_3.py:22:14: C0103: Argument name "sd" doesn't conform to snake\_case naming style (invalid-name)

lab\_3.py:37:23: C0103: Argument name "sd" doesn't conform to snake\_case naming style (invalid-name)

lab\_3.py:53:22: C0103: Argument name "sd" doesn't conform to snake\_case naming style (invalid-name)

lab\_3.py:70:8: W0702: No exception type(s) specified (bare-except)

lab\_3.py:86:14: C0103: Argument name "sd" doesn't conform to snake\_case naming style (invalid-name)

lab\_3.py:103:4: C0103: Variable name "df" doesn't conform to snake\_case naming style (invalid-name)

lab\_3.py:113:15: C0103: Argument name "sd" doesn't conform to snake\_case naming style (invalid-name)

lab\_3.py:145:0: R0912: Too many branches (15/12) (too-many-branches)

------------------------------------------------------------------

Your code has been rated at 8.89/10 (previous run: 7.96/10, +0.93)

\*\*\*\*\*\*\*\*\*\*\*\*\* Module lab\_3

lab\_3.py:129:0: C0301: Line too long (109/100) (line-too-long)

lab\_3.py:130:0: C0301: Line too long (141/100) (line-too-long)

lab\_3.py:70:8: W0702: No exception type(s) specified (bare-except)

lab\_3.py:144:0: R0912: Too many branches (15/12) (too-many-branches)

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Your code has been rated at 9.63/10 (previous run: 8.89/10, +0.74)

\*\*\*\*\*\*\*\*\*\*\*\*\* Module lab\_3

lab\_3.py:133:0: C0301: Line too long (109/100) (line-too-long)

lab\_3.py:134:0: C0301: Line too long (141/100) (line-too-long)

lab\_3.py:74:15: W0703: Catching too general exception Exception (broad-except)

lab\_3.py:74:8: C0103: Variable name "e" doesn't conform to snake\_case naming style (invalid-name)

lab\_3.py:148:0: R0912: Too many branches (15/12) (too-many-branches)

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Your code has been rated at 9.55/10 (previous run: 9.63/10, -0.08)

\*\*\*\*\*\*\*\*\*\*\*\*\* Module lab\_3

lab\_3.py:133:0: C0301: Line too long (109/100) (line-too-long)

lab\_3.py:134:0: C0301: Line too long (141/100) (line-too-long)

lab\_3.py:74:15: W0703: Catching too general exception Exception (broad-except)

lab\_3.py:148:0: R0912: Too many branches (15/12) (too-many-branches)

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Your code has been rated at 9.64/10 (previous run: 9.55/10, +0.09)

\*\*\*\*\*\*\*\*\*\*\*\*\* Module lab\_3

lab\_3.py:148:0: C0301: Line too long (109/100) (line-too-long)

lab\_3.py:149:0: C0301: Line too long (141/100) (line-too-long)

lab\_3.py:163:0: R0912: Too many branches (15/12) (too-many-branches)

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Your code has been rated at 9.75/10 (previous run: 9.75/10, +0.00)

\*\*\*\*\*\*\*\*\*\*\*\*\* Module lab\_3

lab\_3.py:148:0: C0301: Line too long (109/100) (line-too-long)

lab\_3.py:149:0: C0301: Line too long (141/100) (line-too-long)

lab\_3.py:163:0: R0912: Too many branches (15/12) (too-many-branches)

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**Your code has been rated at 9.76/10 (previous run: 9.76/10, +0.00)**