Screen Capture #1

```
zmeyer@syn0095:~/Documents/projects/CIMP8A$ /usr/local/bin/python3.9 "/Users/zmeyer/Document
s/projects/CIMP8A/Week 10/assignment_12_01.py"
Strings as Keys and Values
{'AND': 'Android', 'BB': 'BlackBerry', 'IOS': 'iPhone', 'WIN': 'Windows'}

Numbers as Keys and Strings as Values
{5: 'Five', 6: 'Six', 7: 'Seven'}

Strings as Keys and Mixed Types as Values
{'name': 'The Princess Bride', 'year': 1987, 'price': 9.99}
```

Screen Capture #2

```
Strings as Keys and Mixed Types as Values
{'name': 'The Princess Bride', 'year': 1987, 'price': 9.99}

Accessing an item by Key
iPhone

Updating an item in the dictionary
iPhone X

Testing for a key in the dictionary
WIX is not a valid phone key

Using the dictionary get method
Android
None
Unknown
```

Screen Capture #3

```
Deleting a dictionary item
Starting Count 4
Count after delete 3
BlackBerry was deleted. Count after delete 2
Count after clear 0

zmeyer@syn0095:~/Documents/projects/CIMP8A$ []
```

Screen Capture #4

```
 Loop through all items by key
 AND Android
 BB BlackBerry
 IOS iPhone
 WIN Windows

 Alternate loop through all items by key
 AND Android
 BB BlackBerry
 IOS iPhone
 WIN Windows

 Loop through all items by item
 AND Android
 BB BlackBerry
 IOS iPhone
 WIN Windows

 Loop through all values by value
 Android
 BlackBerry
 iPhone
 Windows

 zmeyer@syn0095:~/Documents/projects/CIMP8A$
```

Screen Capture #5

```
 Convert dictionary to list and sort
 AND Android
 BB BlackBerry
 IOS iPhone
 WIN Windows

 Convert two-dimensional array to dictionary
 {'BB': 'BlackBerry', 'AND': 'Android', 'IOS': 'iPhone', 'WIN': 'Windows'}

 zmeyer@syn0095:~/Documents/projects/CIMP8A$
```

Screen Capture #6

```
 zmeyer@syn0095:~/Documents/projects
 s/projects/CIMP8A/Week 10/state.py"
 COMMAND MENU
 view - View State
 add - Add a State
 del - Delete a State
 exit - Exit the program

 Command: view
 State codes: AZ CA
 Enter state code: ca
 State name: California.

 Command:
```

Screen Capture #7

```
zmeyer@syn0095:~/Documents/projects/CIMP8A$
s/projects/CIMP8A/Week 10/state.py"
COMMAND MENU
view - View State
add - Add a State
del - Delete a State
exit - Exit the program

Command: view
State codes: AZ CA
Enter state code: ca
State name: California.

Command: add
Enter state code: NV
Enter state name: Nevada
Nevada was added.

Command: view
State codes: AZ CA NV
Enter state code:
```

Screen Capture #8

```
zmeyer@syn0095:~/Documents/projects/CIMP8A$ /U
s/projects/CIMP8A/Week 10/state.py"
COMMAND MENU
view - View State
add - Add a State
del - Delete a State
exit - Exit the program

Command: view
State codes: AZ CA
Enter state code: az
State name: Arizona.

Command: del
Enter state code: az
Arizona was deleted.

Command: view
State codes: CA
Enter state code: ca
State name: California.

Command: exit
Bye!
```

Screen Capture #9

```
Creating complex dictionary objects
{'iPhone': ['6', '6s', 'SE', '7', '8', 'X'], 'Android': ['Lollipop', 'Marshmallow', 'Nougat'
, 'Oreo'], 'Windows': ['7', '7.5', '7.8', '8', '8.1', '10'], 'BlackBerry': ['1.0', '3.6', '5
.0', '6.0', '7.0', '7.1']}
zmeyer@syn0095:~/Documents/projects/CIMP8A$
```

Screen Capture #10

```
s/projects/CIMP8A/Week 10/movie_catalog.py"
The Movie Catalog program

Menu
show - Show Movie Info
add - Add a Movie
edit - Edit Movie Info
del - Delete a Movie
exit - Exit the program

Command: show
Enter the title for the movie: Big
Title:        Big
Lead Actor:   Tom Hanks
Release Year: 1988

Command: █
```

Screen Capture #11

```
s/projects/CIMP8A/Week 10/movie_catalog.py"
The Movie Catalog program

Menu
show - Show Movie Info
add - Add a Movie
edit - Edit Movie Info
del - Delete a Movie
exit - Exit the program

Command: add
Enter the title for the movie: Cast Away
Enter the actor name: Tom Hanks
Enter the release year: 2000

Command: show
Enter the title for the movie: Cast Away
Title:        Cast Away
Lead Actor:   Tom Hanks
Release Year: 2000

Command: █
```

Screen Capture #12

```
s/projects/CIMP8A/Week 10/movie_catalog.py"
The Movie Catalog program

Menu
show - Show Movie Info
add - Add a Movie
edit - Edit Movie Info
del - Delete a Movie
exit - Exit the program

Command: show
Enter the title for the movie: Toy Story
Title:        Toy Story
Lead Actor:   Tim Allen
Release Year: 1994

Command: edit
Enter the title for the movie: Toy Story
Enter the actor name: Tom Hanks
Enter the release year: 1995

Command: show
Enter the title for the movie: Toy Story
Title:        Toy Story
Lead Actor:   Tom Hanks
Release Year: 1995

Command: ▮
```

Screen Capture #13

```
s/projects/CIMP8A/Week 10/movie_catalog.py"
The Movie Catalog program

Menu
show - Show Movie Info
add - Add a Movie
edit - Edit Movie Info
del - Delete a Movie
exit - Exit the program

Command: show
Enter the title for the movie: Big
Title:        Big
Lead Actor:   Tom Hanks
Release Year: 1988

Command: del
Enter the title for the movie: Big
Big removed from the catalog.

Command: show
Enter the title for the movie: Big
Sorry, Big does not exist in the catalog.

Command: ▮
```