

4-10. Slices

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows the project structure under "CSC-121-PYTHON [WSL: archlinux]".
- Editor:** The active tab is "slices.py". The code contains a list of guests and prints their names with titles.

```
module-4 > slices.py > ...
1 # original guest list
2 guests = ['marcus aurelius', 'socrates', 'plato', 'aristotle']
3
4 name = guests[0].title()
5 print("Hello, {name}! You are invited to dinner.")
6
7 name = guests[1].title()
8 print("Hello, {name}! You are invited to dinner.")
9
10 name = guests[2].title()
11 print("Hello, {name}! You are invited to dinner.")
12
13 name = guests[3].title()
14 print("Hello, {name}! You are invited to dinner.")
15
16 # Plato can't make it to dinner so he gets replaced with Diogenes
17 name = guests[2].title()
18 print("\n{name} can't make it to dinner.")

20 guests[2] = 'diogenes'
21
22 # new invitations
23 name = guests[0].title()
24 print("Hello, {name}! You are invited to dinner.")
25
26 name = guests[1].title()
27 print("Hello, {name}! You are invited to dinner.")
28
29 name = guests[2].title()
30 print("Hello, {name}! You are invited to dinner.")
31
32 name = guests[3].title()
33 print("Hello, {name}! You are invited to dinner.")

35 # we have a bigger table so we can add more guests to the list
36 print("\nGood news! We found a bigger dinner table, so we can invite more guests!")
37 guests.insert(0, 'confucius')
38 guests.insert(2, 'epictetus')
39 guests.append('seneca')
40
41 # sort the list alphabetically
42 guests.sort()
43
44 # new invitations
45 name = guests[0].title()
46 print("Hello, {name}! You are invited to dinner.")
47
48 name = guests[1].title()
49 print("Hello, {name}! You are invited to dinner.")

51
```

- Bottom Status Bar:** Shows "Ln 45, Col 25" and "Python".

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows the project structure under "CSC-121-PYTHON [WSL: archlinux]".
- Editor:** The active tab is "slices.py". The code has been modified to demonstrate list slicing.

```
module-4 > slices.py > ...
43
44 # new invitations
45 name = guests[0].title()
46 print("Hello, {name}! You are invited to dinner.")
47
48 name = guests[1].title()
49 print("Hello, {name}! You are invited to dinner.")
50
51 name = guests[2].title()
52 print("Hello, {name}! You are invited to dinner.")
53
54 name = guests[3].title()
55 print("Hello, {name}! You are invited to dinner.")
56
57 name = guests[4].title()
58 print("Hello, {name}! You are invited to dinner.")
59
60 name = guests[5].title()
61 print("Hello, {name}! You are invited to dinner.")
62
63 name = guests[6].title()
64 print("Hello, {name}! You are invited to dinner.")

66

67 # print the first three guests
68 print("\nThe first three items on the list are:")
69 for guest in guests[:3]:
70     print(guest.title())
71
72
73 # print three guests from the middle of the list
74 print("\nThree items from the middle of the list are:")
75 middle_index = len(guests) // 2
76 for guest in guests[middle_index - 1:middle_index + 2]:
77     print(guest.title())
78
79 # print the last three guests
80 print("\nThe last three items on the list are:")
81 for guest in guests[-3:]:
82     print(guest.title())

84
```

- Bottom Status Bar:** Shows "Ln 45, Col 25" and "Python".

The screenshot shows a Windows desktop environment with the Visual Studio Code application open. The title bar indicates the file is titled 'slices.py' and is running in a terminal window for 'csc-121-python [WSL: archlinux]'. The code editor displays a Python script that prints names from a list. The terminal window shows the output of the script being run in a zsh shell. The status bar at the bottom provides system information like temperature (47°F), battery level (Clear), and date/time (2/16/2026).

```
1 # original guest list
2 guests = ['marcus aurelius', 'socrates', 'plato', 'aristotle']
3
4 name = guests[0].title()
5 print("Hello, {name}! You are invited to dinner.")
6
7 name = guests[1].title()
8 print("Hello, {name}! You are invited to dinner.")
9
10 name = guests[2].title()
11
12 print("Good news! We found a bigger dinner table, so we can invite more guests!")
13
14 Hello, Marcus Aurelius! You are invited to dinner.
15 Hello, Confucius! You are invited to dinner.
16 Hello, Diogenes! You are invited to dinner.
17 Hello, Epictetus! You are invited to dinner.
18 Hello, Marcus Aurelius! You are invited to dinner.
19 Hello, Seneca! You are invited to dinner.
20 Hello, Socrates! You are invited to dinner.
21
22 The first three items on the list are:
23 Aristotele
24 Confucius
25 Diogenes
26
27 Three items from the middle of the list are:
28 Diogenes
29 Epictetus
30 Marcus Aurelius
31
32 The last three items on the list are:
33 Marcus Aurelius
34 Seneca
35 Socrates
```