

5-3, 5-4, and 5-5. Alien Colors

The screenshot shows the VS Code interface with the file `alien_colors.py` open in the editor. The code implements three if-else statements to determine alien colors and their corresponding points. It includes comments explaining the logic for each section.

```
alien_colors.py
module-5 > alien_colors.py > ...
1 # 5-3. Alien Colors #1
2 print("5-3. Alien Colors #1")
3
4 # passes
5 alien_color = 'green'
6
7 print("\tThis test passes because the alien is green:")
8 if alien_color == 'green':
9     print("\t\tYou just earned 5 points.")
10
11 # fails
12 alien_color = 'yellow'
13
14 print("\n\thist test fails because the alien is not green:")
15 if alien_color == 'green':
16     print("\t\tYou just earned 5 points.")
17
18 # 5-4. Alien Colors #2
19 print("\n5-4. Alien Colors #2")
20
21 # passes
22 alien_color = 'green'
23
24 print("\tThis if-else test passes because the alien is green:")
25 if alien_color == 'green':
26     print("\t\tYou just earned 5 points.")
27 else:
28     print("\t\tYou just earned 10 points.")
29
30 # fails
31 alien_color = 'yellow'
32
33 print("\tThis if-else test fails because the alien is not green:")
34 if alien_color == 'green':
35     print("\t\tYou just earned 5 points.")
36 else:
37     print("\t\tYou just earned 10 points.")
38
39 # 5-5. Alien Colors #3
40 print("\n5-5. Alien Colors #3")
41
42 # elif test passes for green
43 alien_color = 'green'
44
45 print("\tThis elif test passes because the alien is green:")
46 if alien_color == 'green':
47     print("\t\tYou just earned 5 points.")
48 elif alien_color == 'yellow':
49     print("\t\tYou just earned 10 points.")
50 else:
51     print("\t\tYou just earned 15 points.")
52
53 # elif test passes for yellow
54 alien_color = 'yellow'
55
56 print("\n\tThis elif test passes because the alien is yellow:")
57 if alien_color == 'green':
58     print("\t\tYou just earned 5 points.")
59 elif alien_color == 'yellow':
60     print("\t\tYou just earned 10 points.")
61 else:
62     print("\t\tYou just earned 15 points.")
63
64 # elif test passes for red
65 alien_color = 'red'
66
67 print("\n\tThis elif test passes because the alien is not green or yellow:")
68 if alien_color == 'green':
69     print("\t\tYou just earned 5 points.")
70 elif alien_color == 'yellow':
71     print("\t\tYou just earned 10 points.")
72 else:
73     print("\t\tYou just earned 15 points.)
```

The screenshot shows the VS Code interface with the file `alien_colors.py` open in the editor. The code is identical to the one in the previous screenshot, but it includes additional elif blocks for the 'yellow' and 'red' cases, demonstrating how to handle multiple conditions in an elif chain.

```
alien_colors.py
module-5 > alien_colors.py > ...
38
39 # 5-5. Alien Colors #3
40 print("\n5-5. Alien Colors #3")
41
42 # elif test passes for green
43 alien_color = 'green'
44
45 print("\tThis elif test passes because the alien is green:")
46 if alien_color == 'green':
47     print("\t\tYou just earned 5 points.")
48 elif alien_color == 'yellow':
49     print("\t\tYou just earned 10 points.")
50 else:
51     print("\t\tYou just earned 15 points.")
52
53 # elif test passes for yellow
54 alien_color = 'yellow'
55
56 print("\n\tThis elif test passes because the alien is yellow:")
57 if alien_color == 'green':
58     print("\t\tYou just earned 5 points.")
59 elif alien_color == 'yellow':
60     print("\t\tYou just earned 10 points.")
61 else:
62     print("\t\tYou just earned 15 points.")
63
64 # elif test passes for red
65 alien_color = 'red'
66
67 print("\n\tThis elif test passes because the alien is not green or yellow:")
68 if alien_color == 'green':
69     print("\t\tYou just earned 5 points.")
70 elif alien_color == 'yellow':
71     print("\t\tYou just earned 10 points.")
72 else:
73     print("\t\tYou just earned 15 points.)
```

The screenshot shows the Visual Studio Code interface running in WSL (ArchLinux). The Explorer sidebar on the left lists files and folders, including `alien_colors.py`, `module-1`, `module-2`, `module-3`, `module-4`, `module-5`, `alien_colors.md`, and `images`. The `alien_colors.py` file is open in the editor, displaying Python code for an alien color game. The terminal at the bottom shows the command `python alien_colors.py` being run, followed by the program's output:

```
5-3. Alien Colors #1
This test passes because the alien is green:
You just earned 5 points.

This test fails because the alien is not green:
You just earned 10 points.

5-4. Alien Colors #2
This elif test passes because the alien is green:
You just earned 5 points.

This elif test passes because the alien is yellow:
You just earned 10 points.

This elif test passes because the alien is not green or yellow:
You just earned 15 points.

5-5. Alien Colors #3
This elif test passes because the alien is green:
You just earned 5 points.
```