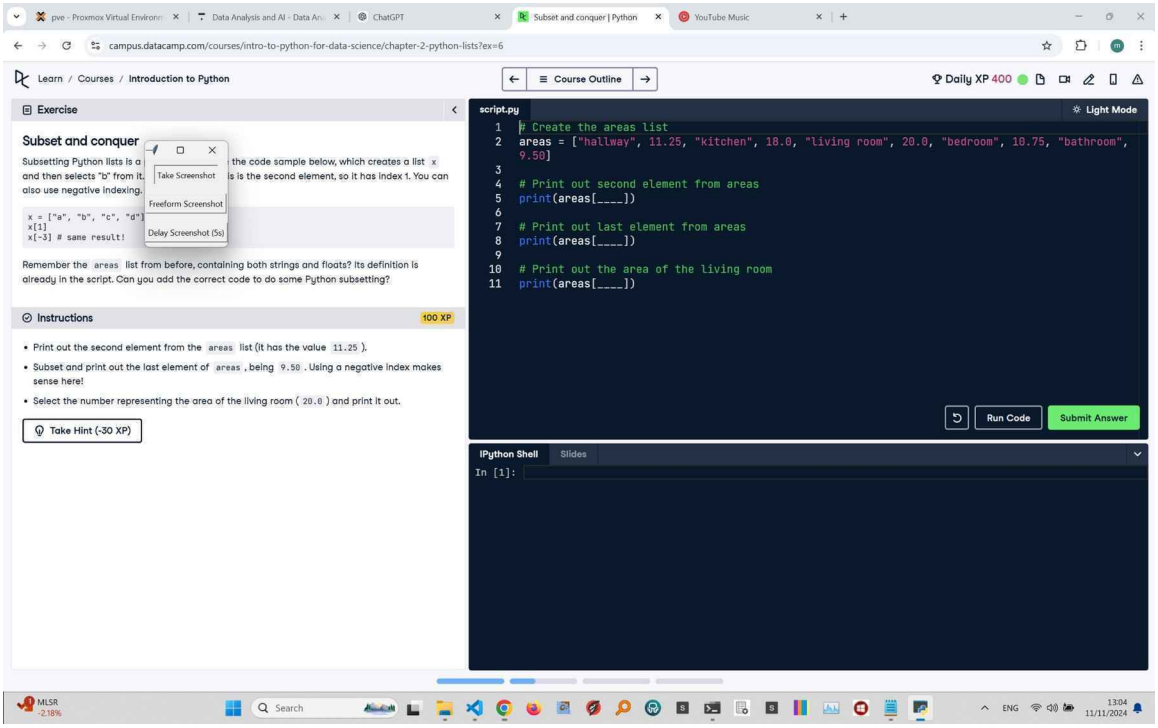
Subset and Conquer - Python Exercise

Below is the image provided along with the recreated question, terminal output, and answer:



Recreated Question and Terminal

Subset and Conquer

Subsetting Python lists is a piece of cake. Take the code sample below, which creates a list x and then selects "b" from it. "b" is the second element, so it has index 1. You can also use negative indexing.

```
x = ["a", "b", "c", "d"]
x[1]   # selects "b"
x[-3]  # same result!
```

Remember the areas list from before, containing both strings and floats? Its definition is already in the script. Can you add the correct code to do some Python subsetting?

Instructions:

- Print out the second element from the areas list (it has the value 11.25).
- Subset and print out the last element of areas, being 9.50. Using a negative index makes sense here!
- Select the number representing the area of the living room (20.0) and print it out.

Answer

```
# Create the areas List
areas = ["hallway", 11.25, "kitchen", 18.0, "living room", 20.0, "bedroom", 10.75, "bathroom", 9.50]

# Print out second element from areas
print(areas[1])

# Print out last element from areas
print(areas[-1])

# Print out the area of the living room
print(areas[5])
```

Explanation of the Answer

The code uses indexing to access elements in the areas list. areas[1] retrieves 11.25, the second element. areas[-1] accesses the last element, 9.50, using negative indexing. areas[5] retrieves 20.0, the area of the living room. Indexing helps extract specific values efficiently.