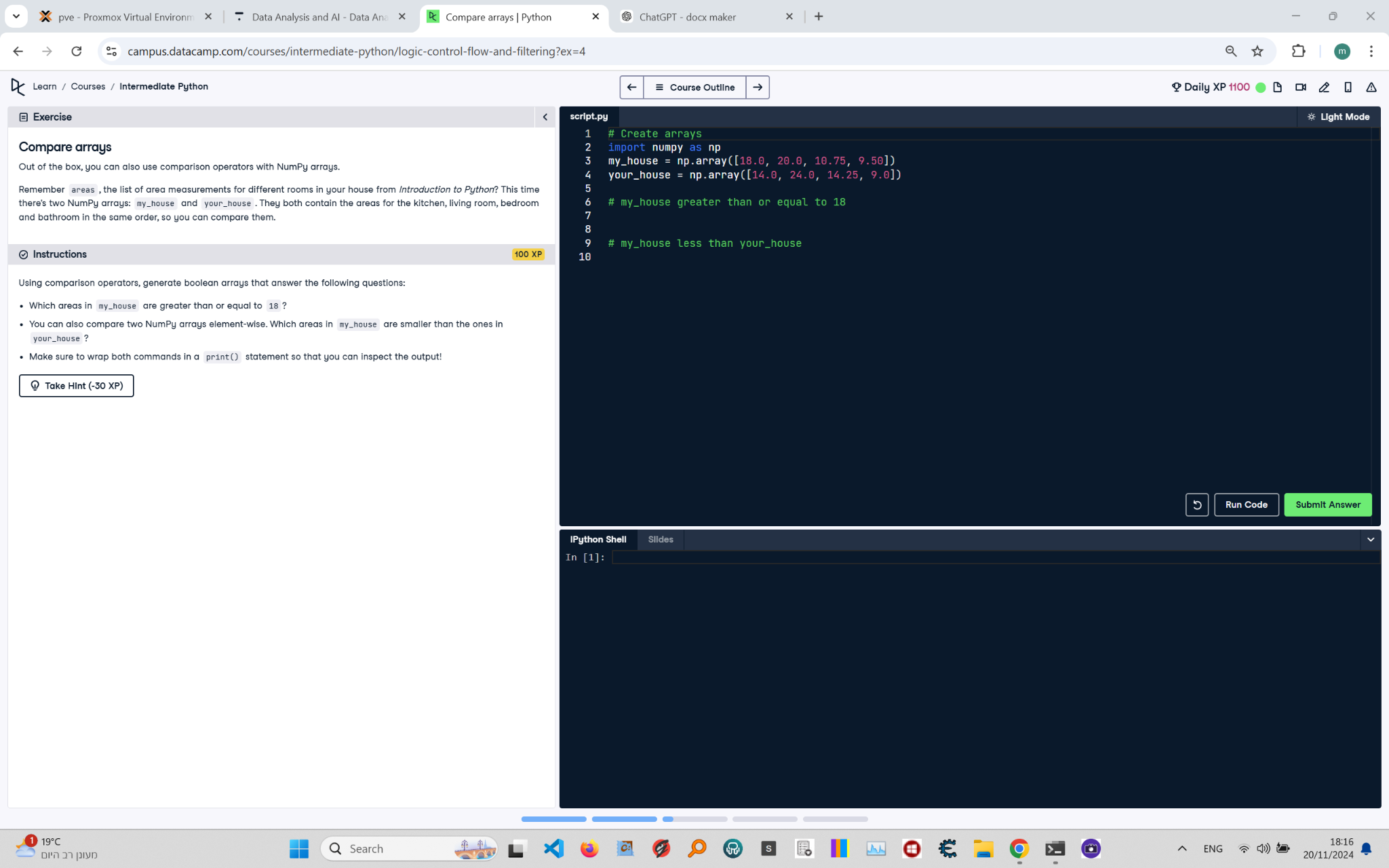
# Compare arrays in Python



\*\*Question:\*\*

Using comparison operators, generate boolean arrays that answer the following questions:  
1. Which areas in `my\_house` are greater than or equal to 18?  
2. Which areas in `my\_house` are smaller than the ones in `your\_house`?  
Make sure to wrap both commands in a `print()` statement so that you can inspect the output!

\*\*Answer:\*\*

Here is the Python code that solves the problem:

# Create arrays  
import numpy as np  
  
my\_house = np.array([18.0, 20.0, 10.75, 9.50])  
your\_house = np.array([14.0, 24.0, 14.25, 9.0])  
  
# my\_house greater than or equal to 18  
print(my\_house >= 18)  
  
# my\_house less than your\_house  
print(my\_house < your\_house)

\*\*Explanation of the Code:\*\*

1. \*\*Importing numpy library\*\*: The numpy library is imported to perform array-based operations.  
2. \*\*Define `my\_house` and `your\_house` arrays\*\*: These arrays represent the areas for different rooms in two houses.  
3. \*\*Comparison operation (greater than or equal to)\*\*: The code `my\_house >= 18` generates a boolean array that indicates which elements of `my\_house` are greater than or equal to 18.  
4. \*\*Comparison operation (less than)\*\*: The code `my\_house < your\_house` compares elements of `my\_house` and `your\_house` element-wise, returning a boolean array indicating which elements of `my\_house` are smaller than the corresponding elements in `your\_house`.  
5. \*\*Printing the results\*\*: The results of both comparisons are printed for inspection.