Sampling Deals - Step 2/3

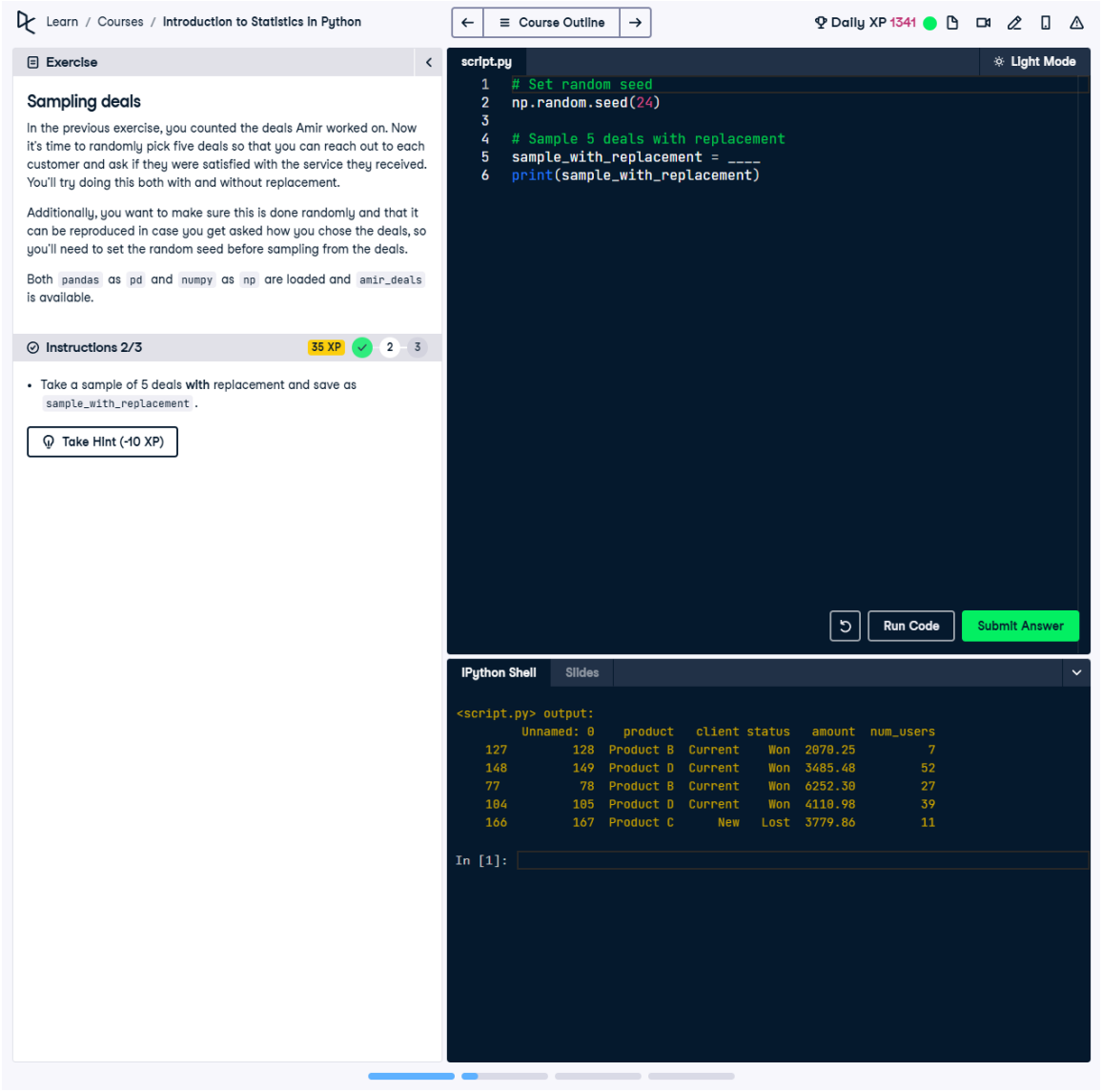

Figure: Screenshot showing the setup for sampling 5 deals with replacement using a random seed.

Question

In the previous exercises, you counted the deals Amir worked on. Now it’s time to randomly pick five deals so that you can reach out to each customer and ask if they were satisfied with the service they received. You’ll try doing this both with and without replacement.

Instructions:

1. Set the random seed to `24` to ensure reproducibility.
2. Take a sample of 5 deals with replacement and save as `sample_with_replacement`.
3. Print the sampled deals.

Corrected Code Solution

```
import pandas as pd
import numpy as np

# Set random seed
np.random.seed(24)

# Sample 5 deals with replacement
sample_with_replacement = amir_deals.sample(n=5, replace=True)
print(sample_with_replacement)
```

Answer Explanation

1. **Setting Random Seed:** The random seed is set to `24` to ensure that the sampling process is reproducible. This ensures consistent results across multiple runs of the code.

2. **Sampling With Replacement:** The `sample()` method is used with the parameter `replace=True`, allowing deals to be selected multiple times. This means a deal can appear more than once in the sample.

3. **Purpose:** Sampling with replacement is useful when repetitions are allowed or when you need to simulate scenarios where replacement is expected, such as bootstrapping in statistics.

4. **Output:** The sampled deals are printed, showing the details of 5 deals, where some deals may appear more than once due to the replacement.