

The screenshot shows a web-based Python exercise interface. On the left, the 'Exercise' panel is titled 'Using a list comprehension'. It explains that the user will use the `lists2dict()` function to convert a list of lists into a list of dictionaries. It mentions that `feature_names` and `row_lists` are preloaded, and that `row_lists` is a list of lists where each sublist represents a row of data. The goal is to use a list comprehension to create a list of dictionaries where the keys are the header names and the values are the row entries. Below the instructions is a 'Take Hint (-30 XP)' button.

On the right, the 'script.py' editor shows the following code:

```
1 # Print the first two lists in row_lists
2 print(____)
3 print(____)
4
5 # Turn list of lists into list of dicts: list_of_dicts
6 list_of_dicts = [____ for ____ in ____]
7
8 # Print the first two dictionaries in list_of_dicts
9 print(____)
10 print(____)
```

At the bottom right of the code editor are buttons for 'Run Code' and 'Submit Answer'.

Below the code editor is a 'Python Shell' window with a prompt 'In [1]:'.

Question: Using a list comprehension

Correct Answer and Explanation:

Code Implementation:

```
# Print the first two lists in row_lists
print(row_lists[0])
print(row_lists[1])
```

```
# Turn list of lists into list of dicts: list_of_dicts
list_of_dicts = [lists2dict(feature_names, sublist) for sublist in row_lists]
```

```
# Print the first two dictionaries in list_of_dicts
print(list_of_dicts[0])
print(list_of_dicts[1])
```

Explanation:

1. `print(row_lists[0])` and `print(row_lists[1])`:
 - Prints the first two lists in the `row_lists` list. Each sublist represents a row of data.

2. ``list_of_dicts = [lists2dict(feature_names, sublist) for sublist in row_lists]`` :
- A list comprehension is used to iterate over each ``sublist`` in ``row_lists``.
- The ``lists2dict`` function is called for each ``sublist``, converting it into a dictionary where keys come from ``feature_names`` and values come from the ``sublist``.

3. ``print(list_of_dicts[0])`` and ``print(list_of_dicts[1])`` :
- Prints the first two dictionaries from ``list_of_dicts``. Each dictionary maps feature names to their corresponding row values.