

## Rating the Weather Conditions

### Question:

Count the unique values in 'bad\_conditions' column and sort the index. Create a dictionary called mapping that maps the bad\_conditions integers to the specified strings. Convert the bad\_conditions integers to strings using the mapping and store the results in a new column called 'rating'. Count the unique values in rating to verify that the integers were properly converted to strings.

### Correct Answer:

```
# Count the unique values in 'bad_conditions' and sort the index
print(weather.bad_conditions.value_counts().sort_index())

# Create a dictionary that maps integers to strings
mapping = {0:'good', 1:'bad', 2:'bad', 3:'bad', 4:'bad', 5:'worse', 6:'worse', 7:'worse', 8:'worse', 9:'worse'}

# Convert the 'bad_conditions' integers to strings using the 'mapping'
weather['rating'] = weather.bad_conditions.map(mapping)

# Count the unique values in 'rating'
print(weather.rating.value_counts())
```

### Explanation:

1. **Checking Unique Values:** This ensures that all unique values in the 'bad\_conditions' column are identified so we can account for them in the mapping dictionary.
2. **Updated Mapping Dictionary:** If additional values like '3' exist in the column, they are now handled in the updated mapping dictionary.

3. **Applying the Mapping:** The `map()` function replaces the numeric values in `bad_conditions` with their corresponding string descriptions.
4. **Counting Unique Values in `rating`:** This verifies that the conversion from integers to strings was successful and that all values have been accounted for.