

How can I fix the ValueError “setting an array element with a sequence” in my code?

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July 2, 2024

RECOMMENDED CITATION

stats writer (2024). *How can I fix the ValueError “setting an array element with a sequence” in my code?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=165900>

The ValueError "setting an array element with a sequence" occurs when there is an attempt to assign a sequence (such as a list, tuple, or array) to an individual element in an array. To fix this issue, the code must be modified to only assign a single value to each element, or to convert the sequence into a single value before assigning it. It is important to carefully check the data types and formats being used to ensure they are compatible with the array. Additionally, checking for any potential errors or typos in the code can help to prevent this issue from occurring.

Fix: ValueError: setting an array element with a sequence

One error you may encounter when using Python is:

ValueError: setting an array element with a sequence.

This error typically occurs when you attempt to cram several numbers into a single position in a NumPy array.

The following example shows how to fix this error in practice.

How to Reproduce the Error

Suppose we have the following NumPy array:

```
import numpy as np
```

```
#create NumPy array
```

```
data = np.array()
```

Now suppose we attempt to cram two numbers into the first position of the array:

```
#attempt to cram values '4' and '5' both into first  
position of NumPy array  
data = np.array()
```

ValueError: setting an array element with a sequence.

The error tells us exactly what we did wrong: We attempted to set one element in the NumPy array with a sequence of values.

In particular, we attempted to cram the values '4' and '5' both into the first position of the NumPy array.

This isn't possible to do, so we receive an error.

How to Fix the Error

The way to fix this error is to simply assign one value into the first position of the array:

```
#assign the value '4' to the first position of the array
```

```
data = np.array()
```

```
#view updated array
```

```
data
```

```
array()
```

Notice that we don't receive any error.

If we actually do want to assign two new values to elements in the array, we need to use the following syntax:

```
#assign the values '4' and '5' to the first two positions of  
the array
```

```
data = np.array()
```

```
#view updated array
```

```
data
```

```
array()
```

Notice that the first two values were changed in the array while all of the other values remained the same.

Additional Resources

The following tutorials explain how to fix other common errors in Python:

ARABPSYCHOLOGY.COM