

Iterating Over Iterables

Problem:

Great, you're familiar with what iterables and iterators are! In this exercise, you will reinforce your knowledge about these by iterating over and printing from iterables and iterators. You are provided with a list of strings `flash`. You will practice iterating over the list by using a for loop. You will also create an iterator for the list and access the values from the iterator.

Code Solution:

```
# Create a list of strings: flash
flash = ['jay garrick', 'barry allen', 'wally west', 'bart allen']

# Print each list item in flash using a for loop
for person in flash:
    print(person)

# Create an iterator for flash: superhero
superhero = iter(flash)

# Print each item from the iterator
print(next(superhero))
print(next(superhero))
print(next(superhero))
print(next(superhero))
```

Explanation:

1. The list `flash` is defined with names of different characters.
2. A `for` loop is used to iterate over the list and print each element. This demonstrates iterating over an iterable.
3. An iterator `superhero` is created using the `iter()` function. An iterator allows access to elements one at a time using `next()`.
4. The `next()` function is called four times to retrieve and print each element from the iterator.

Output:

```
jay garrick
barry allen
wally west
```

bart allen
jay garrick
barry allen
wally west
bart allen