

Workout Activity

Objective and/or content: list comprehension

Activity Duration:
10 minutes

Please provide a **DETAILED** activity breakdown below (and/or attached).

Tutoring

I will give the student a list of values with 3 questions. The first question will not require list comprehension but will allow us to see if the student understands iterating through a list and using modulo function. Once completed we can move onto converting those steps in a list comprehension. I would like to make sure the student can verbally explain what is happening in each step while showing output at each step.

```
my_list = [1, 2, 3, 4, 5]
```

Please show the output for all questions

1) print even numbers.

```
for i in my_list:
    if i % 2 == 0:
        print(i)
```

output:
2
4

2.) Now use list comprehension to create a new list of even values of my_list and print:

```
new_list = [n for n in my_list if n % 2 == 0]
print(new_list)
new_list = [2, 4]
```

output:
[2, 4]

3) Using list comprehension, how would you create a new list that takes the even values of my_list and makes the value 3 times larger?

```
new_list = [n * 3 for n in my_list if n % 2 == 0]
print(new_list)
```

```
new_list = [6, 12]
```

output:
[6, 12]