

## Solution Review: List of Cubes

This lesson gives a detailed review of how to print a list of cubes using a list comprehension.

WE'LL COVER THE FOLLOWING 

- Solution1: List Comprehension
- Solution2: List Comprehension

## Solution1: List Comprehension #

As we have already seen in the previous exercise, list comprehensions allow for in-place list creation using a range that mathematical operations can be done on. This solution uses the same approach; we can simply use a list comprehension that iterates over a range of 1-21, and cubes each element as it goes.

`[x*x*x for x in range(1,21)]`

variable  
↓  
output expression      reference sequence

```
def getCube():
    l1 = [x*x*x for x in range(1, 21)]
    return l1
l1 = getCube()
print(l1)
```



## Solution2: List Comprehension #

This solution uses the same approach; we can simply use a list comprehension that iterates over a range of 1-21, and takes the power of 2 of each element in

```
x ** y
```

denotes  $x$  raised to power  $y$ , i.e.,  $x^y$

$$x ** y$$

denotes  $x$  raised to power  $y$ , i.e.,  $x^y$

variable

↓

```
[x**3 for x in range(1,21)]
```

↑

output expression

↑

reference sequence

```
def getCube():
    l1 = [x**3 for x in range(1,21)]
    return l1
```

```
l1 = getCube()
print(l1)
```



Now, let's move on to the next challenge of list comprehension.