

Gooooood morning!



Python Review 2 - loops, list comprehensions, & FUNctions

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For Loops → List Comprehensions

For loop

```
cashier_3 = []  
for item in cart:  
    if item % 2 == 0:  
        cashier_3.append(item)
```

List comprehension

```
cashier_3 = [item for item in cart if item % 2 == 0]
```

For Loops → Dictionary Comprehensions 1

```
even_squares = {}
```

```
for n in range(11):
```

```
    if n % 2 == 0:
```

```
        even_squares[n] = n**2
```

```
even_squares
```

```
{0: 0, 2: 4, 4: 16, 6: 36, 8: 64, 10: 100}
```

```
even_squares = {n:n**2 for n in range(11) if n % 2 == 0}
```

```
even_squares
```

```
{0: 0, 2: 4, 4: 16, 6: 36, 8: 64, 10: 100}
```

For Loops → Dictionary Comprehensions 2

```
even_squares = {0: 0, 2: 4, 4: 16, 6: 36, 8: 64, 10: 100}
```

```
even_square_roots = {}
```

```
for num, square in even_squares.items():
```

```
    if num != 0:
```

```
        even_square_roots[num] = int(square / num)
```

```
even_square_roots
```

```
{2: 2, 4: 4, 6: 6, 8: 8, 10: 10}
```

```
even_square_roots = {num: int(square / num) for num, square in even_squares.items() if num != 0}
```

```
even_square_roots
```

```
{2: 2, 4: 4, 6: 6, 8: 8, 10: 10}
```

You rock!



