

- Assign the value 7 to the variable `guess_me`. Then, write the conditional tests (if, else, and elif) to print the string 'too low' if `guess_me` is less than 7, 'too high' if greater than 7, and 'just right' if equal to 7.

```
In [1]: 1 guess_me = int(input("enter value : "))
        2 if guess_me == 7 :
        3     print('Just Right')
        4 elif guess_me > 7 :
        5     print("Too High")
        6 else:
        7     print('Too Low')
```

```
enter value : 8
Too High
```

- Assign the value 7 to the variable `guess_me` and the value 1 to the variable `start`. Write a while loop that compares `start` with `guess_me`. Print too low if `start` is less than `guess_me`. If `start` equals `guess_me`, print 'found it!' and exit the loop. If `start` is greater than `guess_me`, print 'oops' and exit the loop. Increment `start` at the end of the loop

```
In [2]: 1 guess_me = 7
        2 start = 1
        3
        4 while True:
        5     if start < guess_me:
        6         print('too low')
        7     elif start == guess_me:
        8         print('found it!')
        9         break
       10     else:
       11         print('oops')
       12         break
       13     start += 1
```

```
too low
too low
too low
too low
too low
too low
found it!
```

- Print the following values of the list [3, 2, 1, 0] using a for loop.

```
In [8]: 1 lst = [3,2,1,0]
        2 for i in lst:
        3     print(i)
```

```
3
2
1
0
```

- Use a list comprehension to make a list of the even numbers in `range(10)`

```
In [4]: 1 even = [item for item in range(10) if item%2==0]
        2 even
```

Out[4]: [0, 2, 4, 6, 8]

- Use a dictionary comprehension to create the dictionary squares. Use range(10) to return the keys, and use the square of each key as its value.

```
In [5]: 1 squares = {num: num * num for num in range(10)}
        2 squares
```

Out[5]: {0: 0, 1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81}

- Construct the set odd from the odd numbers in the range using a set comprehension (10).

```
In [7]: 1 odd = {item for item in range(10) if item%2==1}
        2 odd
```

Out[7]: {1, 3, 5, 7, 9}

- Use a generator comprehension to return the string 'Got' and a number for the numbers in range(10). Iterate through this by using a for loop.

```
In [9]: 1 string_generator = ('Got ' + str(num) for num in range(10))
        2 for item in string_generator:
        3     print(item)
```

```
Got 0
Got 1
Got 2
Got 3
Got 4
Got 5
Got 6
Got 7
Got 8
Got 9
```

- Define a function called good that returns the list ['Harry', 'Ron', 'Hermione']

```
In [11]: 1 def good():
        2     return ['Harry', 'Ron', 'Hermione']
        3 good()
```

Out[11]: ['Harry', 'Ron', 'Hermione']

- Define a generator function called get_odds that returns the odd numbers from range(10). Use a for loop to find and print the third value returned

```
In [16]: 1 def get_odds():
2         for number in range(1,10,2):
3             yield number
4
5 count = 1
6 for number in get_odds():
7     if count == 3:
8         print("The third odd number is", number)
9         break
10    count += 1
```

The third odd number is 5

- Define an exception called OopsException. Raise this exception to see what happens. Then write the code to catch this exception and print 'Caught an oops'

```
In [17]: 1 class OopsException(Exception):
2         pass
3
4 def raiseException(num):
5     if num < 0:
6         raise OopsException(num)
7
8 try:
9     raiseException(-1)
10 except OopsException as err:
11     print('Caught an oops')
```

Caught an oops

- Use zip() to make a dictionary called movies that pairs these lists: titles = ['Creature of Habit', 'Crewel Fate'] and plots = ['A nun turns into a monster', 'A haunted yarn shop'].

```
In [20]: 1 titles = ['Creature of Habit', 'Crewel Fate']
2 plots = ['A nun turns into a monster', 'A haunted yarn shop']
3 dict(zip(titles,plots))
```

```
Out[20]: {'Creature of Habit': 'A nun turns into a monster',
'Crewel Fate': 'A haunted yarn shop'}
```

```
In [ ]: 1
```