

1. 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.
2. 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.
3. Print the following values of the list `[3, 2, 1, 0]` using a for loop.
4. Use a list comprehension to make a list of the even numbers in `range(10)`
5. 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.
6. Construct the set `odd` from the odd numbers in the range using a set comprehension (10).
7. 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.
8. Define a function called `good` that returns the list `['Harry', 'Ron', 'Hermione']`.
9. 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.
10. 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'`.
11. 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']`.

```
guess_me = 7

if guess_me < 7:
    print('too low')
elif guess_me > 7:
    print('too high')
else:
    print('just right')
```

2. Solution:

python

```
guess_me = 7
start = 1

while True:
    if start < guess_me:
        print('too low')
    elif start == guess_me:
        print('found it!')
        break
    else:
        print('oops')
        break
    start += 1
```

3. Solution:

```
css
for i in [3, 2, 1, 0]:
    print(i)
```

4. Solution:

```
scss
even_numbers = [x for x in range(10) if x % 2 == 0]
print(even_numbers)
```

5. Solution:

```
scss
squares = {x: x**2 for x in range(10)}
print(squares)
```

6. Solution:

```
scss
odd = {x for x in range(10) if x % 2 != 0}
print(odd)
```

7. Solution:

python

```
generator = ('Got ' + str(x) for x in range(10))
for item in generator:
    print(item)
```

8. Solution:

```
ruby
def good():
    return ['Harry', 'Ron', 'Hermione']
```

9. Solution:

```
csharp
def get_odds():
    for number in range(1, 10, 2):
        yield number

count = 1
for number in get_odds():
    if count == 3:
        print("The third odd number is:", number)
        break
    count += 1
```

10. Solution:

```
python
class OopsException(Exception):
    pass

try:
    raise OopsException("An error occurred!")
except OopsException as error:
    print("Caught an oops:", error)
```

11. Solution:

```
scss
titles = ['Creature of Habit', 'Crewel Fate']
plots = ['A nun turns into a monster', 'A haunted yarn shop']
```

```
movies = dict(zip(titles, plots))  
print(movies)
```