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'].

**ANS:  
Here are the solutions to your questions:**

**1. Conditional tests for the variable `guess\_me`:**

**```python**

**guess\_me = 7**

**if guess\_me < 7:**

**print('too low')**

**elif guess\_me > 7:**

**print('too high')**

**else:**

**print('just right')**

**```**

**2. While loop to compare `start` with `guess\_me`:**

**```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. Printing values of the list [3, 2, 1, 0] using a for loop:**

**```python**

**for num in [3, 2, 1, 0]:**

**print(num)**

**```**

**4. List comprehension to make a list of even numbers in range(10):**

**```python**

**even\_numbers = [num for num in range(10) if num % 2 == 0]**

**print(even\_numbers)**

**```**

**5. Dictionary comprehension to create the dictionary `squares`:**

**```python**

**squares = {num: num\*\*2 for num in range(10)}**

**print(squares)**

**```**

**6. Set comprehension to construct the set `odd` from the odd numbers in the range(10):**

**```python**

**odd = {num for num in range(10) if num % 2 != 0}**

**print(odd)**

**```**

**7. Generator comprehension to return the string 'Got ' and a number for the numbers in range(10), iterated through a for loop:**

**```python**

**generator = ('Got ' + str(num) for num in range(10))**

**for item in generator:**

**print(item)**

**```**

**8. Definition of the function `good`:**

**```python**

**def good():**

**return ['Harry', 'Ron', 'Hermione']**

**```**

**9. Definition of the generator function `get\_odds` that returns the odd numbers from range(10) and printing the third value returned:**

**```python**

**def get\_odds():**

**for num in range(10):**

**if num % 2 != 0:**

**yield num**

**count = 0**

**for odd\_num in get\_odds():**

**if count == 2:**

**print(odd\_num)**

**break**

**count += 1**

**```**

**10. Definition of the `OopsException` exception and catching it:**

**```python**

**class OopsException(Exception):**

**pass**

**try:**

**raise OopsException**

**except OopsException:**

**print('Caught an oops')**

**```**

**11. Using `zip()` to make a dictionary `movies` that pairs lists:**

**```python**

**titles = ['Creature of Habit', 'Crewel Fate']**

**plots = ['A nun turns into a monster', 'A haunted yarn shop']**

**movies = dict(zip(titles, plots))**

**print(movies)**

**```**