Assignment_17

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.

```
guess_me = 7

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

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.

```
guess_me = 7
start = 1
if start != guess_me:
    while start != guess_me:
        start += 1
        if start < guess_me:
            print("too low")
        elif start == guess_me:
            print("found it!")
        else:
            print("oops")
            break
else:
    print("found it!")
```

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

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

4. Use a list comprehension to make a list of the even numbers in range(10)

```
even_list = [i for i in range(10) if (i%2) == 0]
print(even_list)
```

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.

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

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

```
odd = {i for i in range(10) if (i%2) == 1}
print(odd)
```

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.

```
string_generator = ('Got ' + str(i) for i in range(10))

for item in string_generator:
    print(item)
```

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

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

print(good())
```

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.

```
def get_odds():
    for i in range(10):
        if (i%2) == 1:
            yield i

t = 0
```

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'.

```
class OopsException(Exception):
    pass

try:
    raise OopsException()
except OopsException:
    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'].

```
titles = ['Creature of Habit', 'Crewel Fate']
plots = ['A nun turns into a monster', 'A haunted yarn shop']
movies = dict(zip(titles, plots))
print(movies)
```