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")

elif guess_me == 7:

   print("your 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.

```
start = 1

while True:

   if start < 7:

      print("too low")

   elif start > 7:

      print("opps")

      break

   elif start == 7:

      print("found it")

   start = start + 1
```

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

```
a = [3, 2, 1, 0]

for i in a:

   print(i)
```

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

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

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.

```
{i:i*i for i in range(10)}
```

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

```
{i for i in range(10) if i%2 != 0}
```

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.

```
a = ("got" + str(i) for i in range(10))

for i in a:

    print(i)
```

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

```
def good():

    return ['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.

```
a = (i for i in range(10) if i%2 != 0)

k = 0

for i in a:

    k = k+1

    if k == 3:

        print(i)
```

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



def with_exception(a):

    if a < 0:

        raise OopsException(a)
```

```
try:
    with_exception(-1)
except OopsException as err:
    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 = {}
for title, plot in zip(titles, plots):
    movies[title] = plot
# or movies = dict(zip(titles, plots))
print(movies)
```