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
m = int(input("Enter the value of guess_me: "))
if m < guess_me:
    print("too low")
elif m > guess_me:
    print("too high")
else:
    print("just right")
```

```
Enter the value of guess_me: 4
too low
```

```
guess_me = 7
m = int(input("Enter the value of guess_me: "))
if m < guess_me:
    print("too low")
elif m > guess_me:
    print("too high")
else:
    print("just right")
```

```
Enter the value of guess_me: 9
too high
```

```
guess_me = 7
m = int(input("Enter the value of guess_me: "))
if m < guess_me:
    print("too low")
elif m > guess_me:
    print("too high")
else:
    print("just right")
```

```
Enter the value of guess_me: 7
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
while start < guess_me:
    print("too low")
    start += 1
while start == guess_me:
    print("found it !")
    start += 1
while start > guess_me:
    print("oops")
    break
```

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

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

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

```
3 2 1 0
```

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]
```

```
[0, 2, 4, 6, 8]
```

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**2 for i in range(10)}
```

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

---

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

```
odd = {i for i in range(20) if i%2 != 0}
print(odd)
```

```
{1, 3, 5, 7, 9, 11, 13, 15, 17, 19}
```

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.

```
m = int(input("Enter the limit: "))
string = ('Got ' + str(n) for n in range(m))
for i in string:
    print(i)
```

```
Enter the limit: 9
Got 0
Got 1
Got 2
Got 3
Got 4
Got 5
Got 6
Got 7
Got 8
```

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

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

```
['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.

```
def get_odds():
    for i in range(10):
        if i%2 != 0:
            yield i
m= list(get_odds())
print(m[2])
```

```
5
```

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')
```

```
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']
dict(zip(titles, plots))
```

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