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.

ANS: guess\_me **=** int(input("enter value : "))

**if** guess\_me **==** 7 :

print('Just Right')

**elif** guess\_me **>** 7 :

print("Too High")

**else**:

print('Too Low')

enter value : 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.

ANS: 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

too low

too low

too low

too low

too low

too low

found it!

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

ANS: lst **=** [3,2,1,0]

**for** i **in** lst:

print(i)

3

2

1

0

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

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

print(even\_numbers)

[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.

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

squares

Out[14]:

{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).

ANS: odd **=** set(num **for** num **in** range(10) **if** num **%** 2 **==** 1)

odd

Out[18]:

{1, 3, 5, 7, 9}

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.

ANS: string\_generator **=** ('Got ' **+** str(num) **for** num **in** range(10))

**for** item **in** string\_generator:

print(item)

Got 0

Got 1

Got 2

Got 3

Got 4

Got 5

Got 6

Got 7

Got 8

Got 9

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

ANS: **def** retunList():

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

retunList()

Out[23]:

['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.

ANS: **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

The third odd number is 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'.

ANS: **class** OopsException(Exception):

**pass**

**def** raiseException(num):

**if** num **<** 0:

**raise** OopsException(num)

**try**:

raiseException(**-**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'].

ANS: titles = ['Creature of Habit', 'Crewel Fate']

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

In [30]:

*# sol1*

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)

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

In [31]:

*#sol2*

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

print(movies)

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