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 = 7

if guess\_me < 7:

print('too low')

elif guess\_me > 7:

print('too high')

else:

print('just right')

1. 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 starts 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

elif start > guess\_me:

print('oops')

break

start += 1

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

**Ans:** for value in [3,2,1,0]:

Print (value)

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

**Ans:** even = [number for number in range(10) if number % 2 == 0]  
 print(even)

1. 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 = {key: key\*key for key in range(10)}

Print (squares)

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

**Ans:** odd = {number for number in range(10) if number % 2 == 1}

print (odd)

1. 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:** for thing in ('Got %s' % number for number in range(10)):  
 print(thing)

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

**Ans:** def good():  
 return ['Harry', 'Ron', 'Hermione']  
 print(good())

1. 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

1. 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:** An exception is an event, which occurs during the execution of a program, that disrupts the normal flow of the program's instructions. When an error occurs within a method, the method creates an object and hands it off to the runtime system.

def enterAge(age):  
 if age<0:  
 raise ValueError('Caught an oops')  
 if age % 2 ==0:  
 print('Entered Age is even')  
 else:  
 print('Entered Age is odd')  
try:  
 num = int(input('Enter your age: '))  
 enterAge(num)  
except ValueError:  
 print('Caught an oops')

1. 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']  
 movies = dict(zip(titles, plots))  
 print(movies)