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.

Ans1

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.

Ans2

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

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

Ans3

my\_list = [3, 2, 1, 0]

for item in my\_list:

print(item)

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

Ans4

even\_numbers = [x for x in range(10) if x % 2 == 0]

print(even\_numbers)

output [0, 2, 4, 6, 8].

5. Use a dictionary comprehension to create the dictionary squares. Use range(10) to return thekeys, and use the square of each key as its value.

Ans5

squares = {x: x\*\*2 for x in range(10)}

print(squares)

output {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).

Ans6

odd = {x for x in range(10) if x % 2 != 0}

print(odd)

output {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.

Ans7

generator = ('Got ' + str(x) for x in range(10))

for item in generator:

print(item)

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

Ans8

def good():

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

output ['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.

Ans9

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

output 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'.

Ans10

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'].

Ans11

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

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

movies = dict(zip(titles, plots))

print(movies)

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