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')

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.

:- 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.

:-

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)

:- even\_nos = [n for n in range(10) if n % 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.

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

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

:- odd = {x for x in range(10) if x % 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.

:- gen = ('Got ' + str(num) for num in range(10))

for item in gen:

print(item)

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.

:-

def get\_odds():

for num in range(1, 10, 2):

yield num

odds\_gen = get\_odds()

# Use a for loop to iterate over the first three values

for i in range(3):

value = next(odds\_gen)

# Print the third value

print(value)

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'.

:-

# Define the OopsException

class OopsException(Exception):

pass

try:

# Raise the OopsException

raise OopsException('Something went wrong!')

except OopsException:

# Catch the OopsException and print a message

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 = dict(zip(titles, plots))

print(movies)

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