1. Explain how, “hungry” is implemented.  
     
   A**.** \_hungry is a class attribute, but because of ‘\_’, it cannot be accessed outside of the class. It cannot be changed once it is accessed.   
     
   The value of "hungry" is stored in the instance "\_hungry”, and cannot be changed again. So that, the random also shows no effect.

2. Explain Why the test is failing (test\_get\_evaluation\_2)  
  
A. Test fails for the LAST TWO assert statements.

- since we are assigning BOUNDARY\_HIGH value at the class level, demo\_1, and demo\_2 instances will have same BOUNDARY\_HIGH value of 103. So, both the assert statements should have same output value of “Normal”

1. Explain Why the test is failing (test\_dataclass())
2. The attributes in the Person class cannot be changed once the object is created because, the parameter **frozen** has been set to **True.**

4. Explain How logging is implemented? And How it works?

1. Logging is a python built-in feature to tract the events when the program runs. It helps to format the log messages, set the logging levels, and gives the output at different destinations. In the code, the logging captures the information related to ERROR, CRITICAL, WARNING etc.  
     
   The RotatingFileHandler, creates a ‘app.log‘ file, to save the log messages. The backupCount specifies that we can save up-to 3 old log files. After that, old files will be deleted.  
     
   The maxBytes=100000 means that, we can save up-to 100000bytes of data in a log file.

The logging.Formatter gives the timestamp including the message, log level etc.  
  
The ‘LOGGER.info()’ give some information related to the initialization.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* **Working** \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

When program starts running, \_\_init\_.py creates a log files and sets the logging level. This log file will have all the information related to that, class initialization, method initialization and so on.

All these messages will be logged to the app.log file according to INFO level. If the log file reaches 100kb (100000bytes), then it creates new files. It happens untill 3 backup files.