Python Programming Lab CA2

MSc SS 2nd semester

1. Write a Python program to create a new class, SMS\_store. The class will instantiate SMS\_store objects, similar to an inbox or outbox on a cellphone:

my\_inbox = SMS\_store()

This store can hold multiple SMS messages (i.e. its internal state will just be a list of messages). Each message will be represented as a tuple:

(has\_been\_viewed, from\_number, time\_arrived, text\_of\_SMS)

The inbox object should provide these methods:

my\_inbox.add\_new\_arrival(from\_number, time\_arrived, text\_of\_SMS)

# Makes new SMS tuple, inserts it after other messages

# in the store. When creating this message, its

# has\_been\_viewed status is set False.

my\_inbox.message\_count()

# Returns the number of sms messages in my\_inbox

my\_inbox.get\_unread\_indexes()

# Returns list of indexes of all not-yet-viewed SMS messages

my\_inbox.get\_message(i)

# Return (from\_number, time\_arrived, text\_of\_sms) for message[i]

# Also change its state to "has been viewed".

# If there is no message at position i, return None

my\_inbox.delete(i) # Delete the message at index i

my\_inbox.clear() # Delete all messages from inbox

Write the class, create a message store object, write tests for these methods, and implement the methods.