

1. Review **True/False**, **Multiple choice** questions
2. **Short Answer** questions, p. 35-36 / 4, 8 (HW 2 assignment)
3. Review the ideas of *Linear Search*, *Binary Search*, and *Selection Sort*, along with their time efficiency.

Chapter 2 review questions (Lecture 3)

1. Review **True/False**, **Multiple choice** questions
2. Review the notions of *encapsulation*, *polymorphism* and *inheritance*.
3. Review how to write *unit tests*.
4. Make sure you know how to define a class in Python.
5. Review **ADT** notion and how to create it or use it.

Chapter 3 review (Lectures 4 & 5)

1. Review **True/False**, **Multiple choice** questions
2. Review array-based lists, along with the efficiency analysis (for each operation).
3. Review Python Dictionary, along with efficiency analysis.

Chapter 4 review (Lectures 6 & 7)

1. Review **True/False**, **Multiple choice** questions
2. Review and linked lists, along with the efficiency analysis (for each operation).
3. Review Python memory model with pictorial representations.

*Examples* : Give a pictorial representation of the Python's memory during the execution of the following codes:

```
import copy
b = [[1,2],[3,4,5],6]
c = b
c[0] = 0
d = c[:]
e = copy.deepcopy(d)
c.append(7)
(HW#6, Short-Answer questions: p. 151 / 2)
```

```
def f1(a,b,c):
    a.append(b)
    a.append(c)
    a = b+c
    b += 10
    print(a,b)
    return a
```

```
def main():
    x=[1]
    y,z = 10,20
    y = f1(x,y,z)
    print(x,y,z)
```

Midterm exam sample

4. Review iterators (section 4.5)