

- I. more **super** constructor calls (11.4 pp. 442-443)
Open AP1ch11lab05Test.java, TheSuperClass.java, Subclass.java
and then Run **AP1ch11lab05Test.java**

The output should be:

Hello
Hi
Hello
Hi

Hello
Bye
Hello
Bye

Goodbye
Adios
Goodbye
Adios

All done

Look at the code in the three classes and answer the following

- 1a) obj1 is a reference object of what class type? 1a) _____
- b) When this object is created with **new** what constructor is called?
(Note: Use the number of explicit parameters to help to answer this question.)
b) _____
- c) Is the first output word above of Hello found in the class called SubClass? (yes/no) c) _____
- d) i) In what class is the word Hello found? d) i) _____
ii) In which constructor is it found?
(Note: Use the number of explicit parameters to help to answer this question.)
ii) _____
- d) Is the second output word above of Hi found in the class called TheSuperClass? (yes/no) c) _____
- e) i) In what class is the word Hi found? e) i) _____
ii) In which constructor is it found?
(Note: Use the number of explicit parameters to help to answer this question.)
ii) _____

OVER

- f) i) obj2 is a reference object of what class type? f) i) _____
- ii) but it (obj2) refers to (points) to an object of what type? ii) _____

Note: When this object (obj2) is created with **new** you get the same output as what happened with obj1.

2a) obj3 is a reference object of what class type? 2a) _____

b) When this object is created with **new** what constructor is called?
(Note: Use the number of explicit parameters to help to answer this question.)

b) _____

c) Is the third output word found earlier of Hello found in the class called SubClass? (yes/no) c) _____

d) i) In what class is the word Hello found? d) i) _____
ii) In which constructor is it found?
(Note: Use the number of explicit parameters to help to answer this question.)

ii) _____

d) Is the output word found earlier of Bye found in the class called TheSuperClass? (yes/no) c) _____

e) i) In what class is the word Bye found? e) i) _____
ii) In which constructor is it found?
(Note: Use the number of explicit parameters to help to answer this question.)

ii) _____

- f) i) obj4 is a reference object of what class type? f) i) _____
- ii) but it (obj4) refers to (points) to an object of what type? ii) _____

Note: When this object (obj4) is created with **new** you get the same output as what happened with obj3.

continued

- 3a) obj5 is a reference object of what class type? 2a) _____
- b) When this object is created with **new** what constructor is called?
(Note: Use the number of explicit parameters to help to answer this question.)
- b) _____
- c) Is the first output word found earlier of Goodbye found in the class called SubClass? (yes/no) c) _____
- d) i) In what class is the word Goodbye found? d) i) _____
ii) In which constructor is it found?
(Note: Use the number of explicit parameters to help to answer this question.)
- ii) _____
- d) Is the output word found earlier of Adios found in the class called TheSuperClass? (yes/no) c) _____
- e) i) In what class is the word Adios found? e) i) _____
ii) In which constructor is it found?
(Note: Use the number of explicit parameters to help to answer this question.)
- ii) _____
- f) i) obj6 is a reference object of what class type? f) i) _____
ii) but it (obj6) refers to (points) to an object of what type? ii) _____

Note: When this object (obj6) is created with **new** you get the same output as what happened with obj5.

- 4) Predict what the output would be if the line `super (a);` in `subClass` were deleted. What is the difference?
-

Summary: If no **super** constructor call is used in a subclass constructor the default constructor of the superclass is the first thing that is called and then it returns back to the subclass constructor.

Note:

- 1) If there is no default constructor in the superclass an error will occur.
- 2) The **super** call in the subclass constructor must be the first line of code in the constructor or an error will occur.

Turn in this sheet to be graded!