Answers for HW 2

Where necessary I have put the question to indicate what I’m answering. When the question has only one answer I am only putting the answer.

2.6
public class Student
{
}
}
public class LabClass
{
}

2.7
Does it matter where the public goes in the class definition?
   Yes
Do you see a difference in the class diagram?
   Yes there’s a little broken arrow thingy on the class.
Do you get an error message?
   Yes: <identifier> expected
Does this explain what is going on?
   Not really. It could be lots of things.

2.8
Yes

2.11
int, Student, Server

2.12
alive, tutor, game

2.13
Does it matter if the access modifier comes before or after the type?
   Yes
Does the class diagram give a clue if it is ok?
   Not really, it just indicates that you need to compile. After compilation you get the broken arrow symbol.
Do you get an error message?
   Yes: <identifier> expected

2.16
Student
name = petsName;

What is wrong with the constructor?
The method declares a local variable called price. The local variable will go out of scope and its lifetime will end when the constructor is finish and the field will not have a value.
Will it compile?
Yes
Do you notice something with the inspector?
Yes, the field is not initialized to the value passed in from the constructor. It is still zero.
Can you explain why this is?
The local variable will go out of scope and its lifetime will end when the constructor is finish and the field will not have a value. Also, the local variable hides the field and so the local variable is used not the field.

‘What is the balance of the ticket machine?’

public int getTotal()
{
    return total;
}

missing return statement

The method has a return type and the name of the method does not match the name of the class.

public void setPrice(int ticketCost)
{
    price = ticketCost;
}

public void showPrice()
{
    System.out.println("The price of a ticket is" + price + "cents.");
}
2.38
No because both of the previous versions have quotes around what would be the variable. Therefore what gets displayed is the literal string not the variable contents.

2.40
Implement an empty method.
```java
public void empty()
{
    total = 0;
}
```
Is the method a mutator or an accessor?
A mutator because it changes the value of total.

2.42
```java
public TicketMachine()
{
    price = 500;
    balance = 0;
    total = 0;
}
```