Lab 4

Q1: What is stored in the static heap, stack, dynamic heap?

Static heap: the class objects and static variables are stored.

Stack: the method calls, local variables, and object references are stored.

Dynamic heap: the objects are stored.

Q2: What are objects in the program?

The objects in the program are item and sc.

Q3: What is the item variable storing?

Vase, Statue, Painting.

Q4: Why must you cast to call the method inputVase()/outputVase()?

Because this method is defined on Vase class, and we need to cast the object to that type in order to access the method.

If you don't do this, the compiler would not know which method to call and would raise an error.

Q5: What is the error thrown when you cast it wrong?

It's ClassCastException.

Q6: **What methods can you call if you don't cast the item variable?**

It's input and output.