

Part 2:

Program runs:

- Step 1: Print the menu and get choice from user.
- Step 2: With selection, program will run each method.
- Step 3: Run Step 1.

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.

What are objects in the program?

- The objects in the program are item and sc.

What is the item variable storing?

- May be Vase, Statue, Painting.

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.

What is the error thrown when you cast it wrong?

- It's ClassCastException.

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

- It's input and output.