When the program runs:

Step 1: Import classes from DTO package, Scanner class

Step 2: Create options, item and choice, sc

Step 3: Get choice

Step 4: Case 1: Input Vase data

Case 2: Input Statue data

Case 3: Input Painting data

Case 4: Check what item was inputted and output it, if there is no object, ask the user to input object

Step 5: If choice <=4, go to step 3, else stop

1. What is stored in the static heap, stack, dynamic heap?

Static heap: Static method:

getchoice(Object[] options) in Menu class

Stack: local variables, reference variables and methods:

value, creator, height, material, weight, colour, height, width, isColourwater, isFramed, choice, options

sc, item

constructors, getters, setters, input and output methods of Item, Vase, Statue and Painting classes

Heap: objects:

Vase, Statue, Painting

1. What are objects in the program?

Vase, Statue, Painting

1. What is the item variable storing?

item stores information of the refered class. (Ex: when item call Vase, it stores value, creator, height and material)

1. Why must you cast to call the method inputVase()/outputVase()?

When using instanceOf, An explicit cast is required to tell the compiler that you wish to reference the object as a different type.

1. What is the error thrown when you cast it wrong?

Non-static method cannot be referenced from static context

1. What methods can you call if you don’t cast the item variable?

item.output, item.input