Workshop4

Name: Lê Minh Vương
ID: QE170148
Class: PRO192_SE17C03

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*.