WORKSHOP 4

Name: **TRẦN THANH DƯƠNG**

Code: **SE160185**

Class: **AI1601**

**PART 2**

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| STACK | |
| void outputVase() |  |
| void inputVase() | **Scanner** inp |
| void main() in AntiqueShop class | * **String** args[] * **Item** item * **Int** choice * **Scanner** sc |

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| **STATIC HEAP**   * **Item** class * **Vase** class * **Painting** class * **Statue** class * **Scanner** class |
| **DYNAMIC HEAP**   * **Scanner** obj: sc (attributes and methods) * **Scanner** obj: inp (attributes and methods) * **Item** obj: item (attributes and methods) * **Vase** obj (extends from **Item** obj) (attributes and all methods) |

In this case, the program will create a **Vase object** when user type and enter **number 1** on the keyboard, the **Painting** and **Statue object** will have a familiar structure of memory like above. Stack will store all local variables in methods. Static heap will hold all the class declaration which is implemented in the program. Dynamic heap will be used to store objects and all attributes and methods inside them.