HW23

1. What is generic in Java? and type the generic code by yourself.

    a. https://github.com/TAIsRich/chuwa-eij-tutorial/tree/main/02-java-core/src/main/java/com/chuwa/tutorial/t01_basic/generic

2. Read those codes and type it one by one by yourself. the push the code to your branch.
https://github.com/TAIsRich/chuwa-eij-tutorial/tree/main/02-java-core/src/main/java/com/chuwa/tutorial/t06_java8

3. practice stream API at least **3** times

    a. https://blog.devgenius.io/15-practical-exercises-help-you-master-java-stream-api-3f9c86b1cf82

4. Practice Optional methods at least 2 times

    a. https://github.com/TAIsRich/chuwa-eij-tutorial/blob/main/02-java-core/src/main/java/com/chuwa/tutorial/t06_java8/exercise/ShoppingCartUtil.java

5. Write the Singleton design pattern include eager load and lazy load.

6. What is Runtime Exception? could you give me some examples?

7. Could you give me one example of NullPointerException?

8. What is the Optional class?

9. What are the advantages of using the Optional class?

10. What is the @FunctionalInterface?

11. what is lamda?

12. What is Method Reference?

13. What is Java 8 new features?

14. Lambda can use unchanged variable outside of lambda? what is the details?

15. Describe the newly added features in Java 8?

16. Can a functional interface extend/inherit another interface?

17. What is the lambda expression in Java and How does a lambda expression relate to a functional interface?

18. In Java 8, what is Method Reference?

19. What does the String::ValueOf expression mean?

20. What are Intermediate and Terminal operations?

21. What are the most commonly used Intermediate operations?

22. What is the difference between findFirst() and findAny()?

23. How are Collections different from Stream?