Topic Related Questions

**1.** **What are Java loops?**

**Ans:-**

 Structures to repeatedly execute a block of code.

 Types: for, while, do-while.

 Continue until a condition becomes false.

**2.** **What is enhanced for-loop?**

**Ans:-**

 Simplified loop to iterate over arrays/collections.

 Syntax: for (Type var : collection) { ... }.

 No index handling needed.

**3.** **How do you handle multiple user inputs?**

**Ans:-**

 Use Scanner with multiple nextInt(), nextLine(), etc.

 Or read an entire line and split into parts.

**4.** **How is a switch-case different from if-else?**

**Ans:**

 switch is cleaner for multiple fixed values.

 if-else handles ranges and complex conditions.

**5.** **What are collections in Java?**

**Ans:-**

 Framework for storing/managing groups of objects.

 Includes List, Set, Queue, Map.

**6.** **What is ArrayList?**

**Ans:-**

 Resizable array in java.util.

 Allows duplicate elements and maintains order.

**7.** **How to iterate using iterators?**

**Ans:-**

 Get iterator: Iterator<Type> it = list.iterator();

 Loop: while(it.hasNext()) { it.next(); }.

**8.** **What is a Map?**

**Ans:-**

 Key-value pair storage (HashMap, TreeMap).

 Keys are unique, values can repeat.

**9.** **How to sort a list?**

**Ans:-**

 Use Collections.sort(list); for natural order.

 Or list.sort(comparator); for custom sorting.

**10.** **How to shuffle elements?**

**Ans:-**

In Java, you can shuffle elements in a list using:

Collections.shuffle(list);

This randomly reorders the elements. You need to import java.util.Collections;