Java Collection Exercises [126 exercises with solution]

[An editor is available at the bottom of the page to write and execute the scripts.]

List of Java Collection Exercises :

- ArrayList Exercises [22 exercises with solution]
- LinkedList Exercises [26 exercises with solution]
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- TreeSet Exercises [16 exercises with solution]
- PriorityQueue Exercises [12 exercises with solution]
- HashMap Exercises [12 exercises with solution]
- TreeMap Exercises [26 exercises with solution]

Java Collection: ArrayList Exercises [22 exercises with solution]

1. Write a Java program to create a new array list, add some colors (string) and print out the collection. Go to the editor
Click me to see the solution

2. Write a Java program to iterate through all elements in a array list. Go to the editor
Click me to see the solution

3. Write a Java program to insert an element into the array list at the first position. Go to the editor
Click me to see the solution

4. Write a Java program to retrieve an element (at a specified index) from a given array list. Go to the editor
Click me to see the solution

5. Write a Java program to update specific array element by given element. Go to the editor
Click me to see the solution

6. Write a Java program to remove the third element from a array list. Go to the editor
Click me to see the solution

7. Write a Java program to search an element in a array list. Go to the editor
Click me to see the solution

8. Write a Java program to sort a given array list. Go to the editor
Click me to see the solution

9. Write a Java program to copy one array list into another. Go to the editor
Click me to see the solution

10. Write a Java program to shuffle elements in a array list. Go to the editor
Click me to see the solution

11. Write a Java program to reverse elements in a array list. Go to the editor
Click me to see the solution

12. Write a Java program to extract a portion of a array list. Go to the editor
Click me to see the solution

13. Write a Java program to compare two array lists. Go to the editor
Click me to see the solution

14. Write a Java program of swap two elements in an array list. Go to the editor
Click me to see the solution

15. Write a Java program to join two array lists. Go to the editor
Click me to see the solution

16. Write a Java program to clone an array list to another array list. Go to the editor
Click me to see the solution

17. Write a Java program to empty an array list. Go to the editor
Click me to see the solution

18. Write a Java program to test an array list is empty or not. Go to the editor
Click me to see the solution

19. Write a Java program to trim the capacity of an array list the current list size. Go to the editor
Click me to see the solution

20. Write a Java program to increase the size of an array list. Go to the editor
Click me to see the solution

21. Write a Java program to replace the second element of a ArrayList with the specified element. Go to the editor
Click me to see the solution

22. Write a Java program to print all the elements of a ArrayList using the position of the elements. Go to the editor
Click me to see the solution

Java Collection: LinkedList Exercises [26 exercises with solution]

1. Write a Java program to append the specified element to the end of a linked list. Go to the editor
Click me to see the solution

2. Write a Java program to iterate through all elements in a linked list. Go to the editor
Click me to see the solution

3. Write a Java program to iterate through all elements in a linked list starting at the specified position. Go to the editor
Click me to see the solution

4. Write a Java program to iterate a linked list in reverse order. Go to the editor
Click me to see the solution

5. Write a Java program to insert the specified element at the specified position in the linked list. Go to the editor
Click me to see the solution

6. Write a Java program to insert elements into the linked list at the first and last position. Go to the editor
Click me to see the solution

7. Write a Java program to insert the specified element at the front of a linked list. Go to the editor
Click me to see the solution

8. Write a Java program to insert the specified element at the end of a linked list. Go to the editor
Click me to see the solution

9. Write a Java program to insert some elements at the specified position into a linked list. Go to the editor
Click me to see the solution

10. Write a Java program to get the first and last occurrence of the specified elements in a linked list. Go to the editor
Click me to see the solution

11. Write a Java program to display the elements and their positions in a linked list. Go to the editor
Click me to see the solution

12. Write a Java program to remove a specified element from a linked list. Go to the editor
Click me to see the solution

13. Write a Java program to remove first and last element from a linked list. Go to the editor
Click me to see the solution

14. Write a Java program to remove all the elements from a linked list. Go to the editor
Click me to see the solution

15. Write a Java program of swap two elements in an linked list. Go to the editor
Click me to see the solution

16. Write a Java program to shuffle the elements in a linked list. Go to the editor
Click me to see the solution

17. Write a Java program to join two linked lists. Go to the editor
Click me to see the solution

18. Write a Java program to clone an linked list to another linked list. Go to the editor
Click me to see the solution

19. Write a Java program to remove and return the first element of a linked list. Go to the editor
Click me to see the solution

20. Write a Java program to retrieve but does not remove, the first element of a linked list. Go to the editor
Click me to see the solution

21. Write a Java program to retrieve but does not remove, the last element of a linked list. Go to the editor
Click me to see the solution

22. Write a Java program to check if a particular element exists in a linked list. Go to the editor
Click me to see the solution

23. Write a Java program to convert a linked list to array list. Go to the editor
Click me to see the solution

24. Write a Java program to compare two linked lists. Go to the editor
Click me to see the solution

25. Write a Java program to test an linked list is empty or not. Go to the editor
Click me to see the solution

26. Write a Java program to replace an element in a linked list. Go to the editor
Click me to see the solution

Java Collection: HashSet Exercises [12 exercises with solution]

1. Write a Java program to append the specified element to the end of a hash set. Go to the editor
Click me to see the solution

2. Write a Java program to iterate through all elements in a hash list. Go to the editor
Click me to see the solution

3. Write a Java program to get the number of elements in a hash set. Go to the editor
Click me to see the solution

4. Write a Java program to empty an hash set. Go to the editor
Click me to see the solution

5. Write a Java program to test a hash set is empty or not. Go to the editor
Click me to see the solution

6. Write a Java program to clone a hash set to another hash set. Go to the editor
Click me to see the solution

7. Write a Java program to convert a hash set to an array. Go to the editor
Click me to see the solution

8. Write a Java program to convert a hash set to a tree set. Go to the editor
Click me to see the solution

9. Write a Java program to convert a hash set to a List/ArrayList. Go to the editor
Click me to see the solution

10. Write a Java program to compare two hash set. Go to the editor
Click me to see the solution

11. Write a Java program to compare two sets and retain elements which are same on both sets. Go to the editor
Click me to see the solution

12. Write a Java program to remove all of the elements from a hash set. Go to the editor
Click me to see the solution

Java Collection: TreeSet Exercises [16 exercises with solution]

1. Write a Java program to create a new tree set, add some colors (string) and print out the tree set. Go to the editor
Click me to see the solution

2. Write a Java program to iterate through all elements in a tree set. Go to the editor
Click me to see the solution

3. Write a Java program to add all the elements of a specified tree set to another tree set. Go to the editor
Click me to see the solution

4. Write a Java program to create a reverse order view of the elements contained in a given tree set. Go to the editor
Click me to see the solution

5. Write a Java program to get the first and last elements in a tree set. Go to the editor
Click me to see the solution

6. Write a Java program to clone a tree set list to another tree set. Go to the editor
Click me to see the solution

7. Write a Java program to get the number of elements in a tree set. Go to the editor
Click me to see the solution

8. Write a Java program to compare two tree sets. Go to the editor
Click me to see the solution

9. Write a Java program to find the numbers less than 7 in a tree set. Go to the editor
Click me to see the solution

10. Write a Java program to get the element in a tree set which is greater than or equal to the given element. Go to the editor
Click me to see the solution

11. Write a Java program to get the element in a tree set which is less than or equal to the given element. Go to the editor
Click me to see the solution

12. Write a Java program to get the element in a tree set which is strictly greater than or equal to the given element. Go to the editor
Click me to see the solution

13. Write a Java program to get an element in a tree set which is strictly less than the given element. Go to the editor
Click me to see the solution

14. Write a Java program to retrieve and remove the first element of a tree set. Go to the editor
Click me to see the solution

15. Write a Java program to retrieve and remove the last element of a tree set. Go to the editor
Click me to see the solution

16. Write a Java program to remove a given element from a tree set. Go to the editor
Click me to see the solution

Java Collection: PriorityQueue Exercises [12 exercises with solution]

1. Write a Java program to create a new priority queue, add some colors (string) and print out the elements of the priority queue. Go to the editor
Click me to see the solution

2. Write a Java program to iterate through all elements in priority queue. Go to the editor
Click me to see the solution

3. Write a Java program to add all the elements of a priority queue to another priority queue. Go to the editor
Click me to see the solution

4. Write a Java program to insert a given element into a priority queue. Go to the editor
Click me to see the solution

5. Write a Java program to remove all the elements from a priority queue. Go to the editor
Click me to see the solution

6. Write a Java program to count the number of elements in a priority queue. Go to the editor
Click me to see the solution

7. Write a Java program to compare two priority queues. Go to the editor
Click me to see the solution

8. Write a Java program to retrieve the first element of the priority queue. Go to the editor
Click me to see the solution

9. Write a Java program to retrieve and remove the first element. Go to the editor
Click me to see the solution

10. Write a Java program to convert a priority queue to an array containing all of the elements of the queue. Go to the editor
Click me to see the solution

11. Write a Java program to convert a Priority Queue elements to a string representation. Go to the editor
Click me to see the solution

12. Write a Java program to change priorityQueue to maximum priorityqueue. Go to the editor
Click me to see the solution

Java Collection: HashMap Exercises [12 exercises with solution]

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1. Write a Java program to associate the specified value with the specified key in a HashMap. Go to the editor
Click me to see the solution

2. Write a Java program to count the number of key-value (size) mappings in a map. Go to the editor
Click me to see the solution

3. Write a Java program to copy all of the mappings from the specified map to another map. Go to the editor
Click me to see the solution

4. Write a Java program to remove all of the mappings from a map. Go to the editor
Click me to see the solution

5. Write a Java program to check whether a map contains key-value mappings (empty) or not. Go to the editor
Click me to see the solution

6. Write a Java program to get a shallow copy of a HashMap instance. Go to the editor
Click me to see the solution

7. Write a Java program to test if a map contains a mapping for the specified key. Go to the editor
Click me to see the solution

8. Write a Java program to test if a map contains a mapping for the specified value. Go to the editor
Click me to see the solution

9. Write a Java program to create a set view of the mappings contained in a map. Go to the editor
Click me to see the solution

10. Write a Java program to get the value of a specified key in a map. Go to the editor
Click me to see the solution

11. Write a Java program to get a set view of the keys contained in this map. Go to the editor
Click me to see the solution

12. Write a Java program to get a collection view of the values contained in this map. Go to the editor
Click me to see the solution

Java Collection: TreeMap Exercises [26 exercises with solution]

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1. Write a Java program to associate the specified value with the specified key in a Tree Map. Go to the editor
Click me to see the solution

2. Write a Java program to copy a Tree Map content to another Tree Map. Go to the editor
Click me to see the solution

3. Write a Java program to search a key in a Tree Map. Go to the editor
Click me to see the solution

4. Write a Java program to search a value in a Tree Map. Go to the editor
Click me to see the solution

5. Write a Java program to get all keys from the given a Tree Map. Go to the editor
Click me to see the solution

6. Write a Java program to delete all elements from a given Tree Map. Go to the editor
Click me to see the solution

7. Write a Java program to sort keys in Tree Map by using comparator. Go to the editor
Click me to see the solution

8. Write a Java program to get a key-value mapping associated with the greatest key and the least key in a map. Go to the editor
Click me to see the solution

9. Write a Java program to get the first (lowest) key and the last (highest) key currently in a map. Go to the editor
Click me to see the solution

10. Write a Java program to get a reverse order view of the keys contained in a given map. Go to the editor
Click me to see the solution

11. Write a Java program to get a key-value mapping associated with the greatest key less than or equal to the given key. Go to the editor
Click me to see the solution

12. Write a Java program to get the greatest key less than or equal to the given key. Go to the editor
Click me to see the solution

13. Write a Java program to get the portion of a map whose keys are strictly less than a given key. Go to the editor
Click me to see the solution

14. Write a Java program to get the portion of this map whose keys are less than (or equal to, if inclusive is true) a given key. Go to the editor
Click me to see the solution

15. Write a Java program to get the least key strictly greater than the given key. Return null if there is no such key. Go to the editor
Click me to see the solution

16. Write a Java program to get a key-value mapping associated with the greatest key strictly less than the given key. Return null if there is no such key. Go to the editor
Click me to see the solution

17. Write a Java program to get the greatest key strictly less than the given key. Return null if there is no such key. Go to the editor
Click me to see the solution

18. Write a Java program to get NavigableSet view of the keys contained in a map. Go to the editor
Click me to see the solution

19. Write a Java program to remove and get a key-value mapping associated with the least key in a map. Go to the editor
Click me to see the solution

20. Write a Java program to remove and get a key-value mapping associated with the greatest key in this map. Go to the editor
Click me to see the solution

21. Write a Java program to get the portion of a map whose keys range from a given key (inclusive), to another key (exclusive). Go to the editor
Click me to see the solution

22. Write a Java program to get the portion of a map whose keys range from a given key to another key. Go to the editor
Click me to see the solution

23. Write a Java program to get a portion of a map whose keys are greater than or equal to a given key. Go to the editor
Click me to see the solution

24. Write a Java program to get a portion of a map whose keys are greater than to a given key. Go to the editor
Click me to see the solution

25. Write a Java program to get a key-value mapping associated with the least key greater than or equal to the given key. Return null if there is no such key. Go to the editor
Click me to see the solution

26. Write a Java program to get the least key greater than or equal to the given key. Returns null if there is no such key. Go to the editor
Click me to see the solution