

Which of the following is a correct difference between HashSet and TreeSet?

- 1. ☐ None
- 2. ☐ HashSet can contain duplicate elements whereas TreeSet contains only unique elements.
- 3. ☐ HashSet maintains no order while TreeSet maintains ascending order.
- 4. ☐ TreeSet maintains no order while HashSet maintains ascending order.

Correct

2. Question 10 points

Which of the following is not true for the IdentityHashMap?

- 1. ☐ In IdentityHashMap, two keys k1 and k2 are considered equal if and only if (k1==k2).
- 2. ☐ IdentityHashMap implements the Map interface with a hash table.
- 3. ☐ IdentityHashMap is synchronized.
- 4. ☐ IdentityHashMap is a class present in java.util package.

Incorrect

3. Question 10 points

Which of the following method you need to override for using an object as key in a HashMap?

- 1. ☐ hashCode()
- 2. ☐ None
- 3. ☐ hashKey()
- 4. ☐ hashCode()

Incorrect

4. Question 10 points

Which of the following is a valid difference between Set and Map?

- 1. ☐ Set doesn't maintain any order whereas Map maintains ascending order.
- 2. ☐ Set can contain duplicate elements whereas Map contains only unique elements.
- 3. ☐ Set contains only values whereas Map contains key and values both.
- 4. ☐ None

Incorrect

5. Question 10 points

Which of the following is a correct difference between ArrayList and LinkedList?

- 1. ☐ ArrayList uses a dynamic array whereas the LinkedList uses doubly linked list.

- 2. ☐ ArrayList uses a doubly linked list whereas the LinkedList uses dynamic array.
- 3. ☐ None
- 4. ☐ ArrayList uses a single linked list whereas the LinkedList uses dynamic array.

**Incorrect**

6. Question

**10 points**

**Is it possible to define a Set as readOnly, if yes then how?**

- 1. ☐ None
- 2. ☐ Yes, use Collections.readonlySet(Set s).
- 3. ☐ Yes, use Collections.unmodifiableSet(Set s).
- 4. ☐ No

**Incorrect**

7. Question

**10 points**

**Which of the following is not true in case of a WeakHashMap?**

- 1. ☐ WeakHashMap is a Hash table based implementation of the Map interface with weak keys.
- 2. ☐ An entry in WeakHashMap is automatically removed when it is no longer in use.
- 3. ☐ WeakHashMap is a class present in java.util package.
- 4. ☐ WeakHashMap doesn't allow null keys and null values.

**Incorrect**

8. Question

**10 points**

**Which of the following is not true for a generic collection?**

- 1. ☐ None
- 2. ☐ Generic collection is not mutable.
- 3. ☐ Generic collection is typesafe and checked at compile time.
- 4. ☐ Generic collection doesn't require typecasting.

**Incorrect**

9. Question

**10 points**

**When would you choose to use ArrayList over LinkedList in an application?**

- 1. ☐ None
- 2. ☐ ArrayList is preferred when there are frequent insertions or deletions required in the application.
- 3. ☐ ArrayList is preferred when there is more demand for get via index operations.

4. ☐ ArrayList is preferred when there is growing need of merging or sorting operations.

**Incorrect**

10. Question

**10 points**

**Which of the following is not true for the UnsupportedOperationException?**

1. ☐ This exception implies that the requested operation is not supported.
2. ☐ It occurs if you call add() or remove() method on the readOnly collection.
3. ☐ It occurs if a method is not found in the underlying collection.
4. ☐ None

**Incorrect**

11. Question

**10 points**

**Which of the following is a correct difference between List and Set?**

1. ☐ None
2. ☐ List can hold duplicate elements while Set includes only unique elements.
3. ☐ List maintains no order whereas Set maintains ascending order.
4. ☐ List contain only unique elements whereas Set can contain duplicate elements.

**Incorrect**

12. Question

**10 points**

**Which of the following is a correct method to convert the array of strings into a list?**

1. ☐ Arrays class toList() method
2. ☐ Arrays class asList() method
3. ☐ None
4. ☐ Arrays class doList() method

**Incorrect**

13. Question

**10 points**

**Which of the following is a correct difference between the Iterator and ListIterator?**

1. ☐ None
2. ☐ Iterator traverses the elements only in forward direction whereas the ListIterator traverses back and forth.
3. ☐ Iterator traverses back and forth while the ListIterator traverses the elements in forward direction.
4. ☐ Iterator traverses the elements in backward direction while the ListIterator moves in forward direction.

**Incorrect**

Which of the following is a correct difference between ArrayList and Vector?

1. ☐ ArrayList increases its size by doubling the array size while Vector increases by 50% of the array size.
2. ☐ ArrayList is synchronized while Vector is not.
3. ☐ None
4. ☐ ArrayList is not a legacy class while Vector is the legacy.

Incorrect

What do you understand of hash-collision in a Hashtable?

1. ☐ If two same keys have the different hash value then it leads to hash-collision.
2. ☐ If two same keys have the same hash value then it leads to hash-collision.
3. ☐ If two different keys have the same hash value then it leads to hash-collision.
4. ☐ None

Incorrect

Which of the following class doesn't implement the Set interface?

1. ☐ HashSet
2. ☐ None of the above
3. ☐ LinkedHashSet
4. ☐ TreeSet

Incorrect

What is the default value of load factor in a hashing based collection?

1. ☐ 0.55
2. ☐ 0.75
3. ☐ 0.65
4. ☐ 0.70

Incorrect

When would you choose to use LinkedList over ArrayList in an application?

1. ☐ LinkedList is preferred when application requires to perform frequent get or search operations.
2. ☐ LinkedList is preferred when application requires to perform merging or sorting operations.
3. ☐ None
4. ☐ LinkedList is preferred when applications needs to support insertions or deletions of elements.

**Incorrect**

19. Question

**10 points**

**Which of the following is a correct difference between HashMap and ConcurrentHashMap?**

1. ☐ HashMap maintains the inserted elements in random order while ConcurrentHashMap maintains elements in the sorted order.
2. ☐ HashMap is synchronized while ConcurrentHashMap is not synchronized.
3. ☐ HashMap can have one null key and any number of null values whereas ConcurrentHashMap does not allow null keys and null values.
4. ☐ None

**Incorrect**

20. Question

**10 points**

**Which of the following is not true for a fail-fast iterator?**

1. ☐ Fail fast system reports the failure right away but the system recovers after the failure.
2. ☐ Fail fast iterator throws concurrent modification exception while iterating through the collection of objects.
3. ☐ Fail fast immediately reports any failure and fail fast system fails whenever a problem occurs.
4. ☐ None

**Incorrect**

21. Question

**10 points**

**Which of the following is a correct difference between HashMap and Hashtable?**

1. ☐ HashMap contains only values whereas Hashtable contains key and values both.
2. ☐ long
3. ☐ HashMap is not synchronized while the Hashtable is synchronized.
4. ☐ HashMap can contain duplicate elements whereas the Hashtable contains only unique elements.

**Incorrect**

22. Question

**10 points**

**What is the design pattern followed by Iterator?**

1. ☐ Factory design pattern

- 2. ☐ Observer design pattern
- 3. ☐ None
- 4. ☐ Iterator design pattern

**Incorrect**

23. Question

**10 points**

**What is the correct difference between HashSet and HashMap?**

- 1. ☐ HashSet maintains no order whereas HashMap maintains ascending order.
- 2. ☐ long
- 3. ☐ HashSet can contain duplicate elements whereas HashMap contains only unique elements.
- 4. ☐ HashSet contains only values whereas HashMap contains the key and value pair.

**Incorrect**

24. Question

**10 points**

**What is the correct difference between HashMap and TreeMap?**

- 1. ☐ HashMap maintains no order but TreeMap maintains ascending order.
- 2. ☐ HashMap can contain duplicate elements whereas TreeMap contains only unique elements.
- 3. ☐ HashMap contains only values whereas TreeMap contains key and values both.
- 4. ☐ None

**Incorrect**

25. Question

**10 points**

**Which of the following is a correct difference between the Iterator and Enumeration?**

- 1. ☐ Iterator can traverse legacy and non-legacy containers whereas the Enumeration can traverse only legacy containers.
- 2. ☐ Enumeration is fail-fast while Iterator is not fail-fast.
- 3. ☐ Iterator is faster than Enumeration.
- 4. ☐ None

**Incorrect**