

Q2)) What are the main differences between array and collection?

Arrays	Collection
<ul style="list-style-type: none">● Arrays are fixed in size i.e once the array with the specific size is declared then we can't alter its size afterward.● Arrays due to fast execution consumes more memory and has better performance.● Arrays can hold the only the same type of data in its collection that is only homogeneous data types elements are allowed in case of arrays.● Arrays can hold both object and primitive type data.● Arrays due to its storage and internal implementation better in performance.	<ul style="list-style-type: none">● The collection is dynamic in size i.e based on requirement size could be get altered even after its declaration.● Collections, on the other hand, consumes less memory but also have low performance as compared to arrays.● Collection, on the other hand, can hold both homogenous and heterogeneous elements.● On the other hand, collection can hold only object types but not the primitive type of data.● Collection on the other hand with respect to performance is not recommended to use.

Q3) What are differences between checked and unchecked exceptions in java?Create user defined checked and unchecked exceptions.

Checked Exception	Unchecked Exception
<ul style="list-style-type: none">● Checked exception occurs at compile time.● The compile checks a checked exception.● These types of exceptions can be handled at the time of compilation.● They are the sub-class of the exception class.	<ul style="list-style-type: none">● Unchecked exception occur at runtime.● The compiler does not check these types of exceptions.● These types of exceptions cannot be a catch or handle at the time of compilation, because they ger generated by the mistakes in the

- Here, the JVM needs the exception to catch and handle.
- Examples of checked exceptions:
 1. File Not Found Exception
 2. No Such Field Exception

- program.
- They are runtime exceptions and hence are not a part of the Exception class.
 - Here, the JVM does not require the exception to catch and handle.
 - Examples of unchecked exceptions:
 1. No Such Element Exception
 2. Undeclared Throwable Exception