JAVA INTERVIEW QUESTIONS

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| **Answer:** |
| Yes, we can declare main method as private. It compiles without  any errors, but in runtime, it says main method is not public. |
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1. Can we declare the main method of our class as private?

1. **What are the various access specifiers for Java classes?**

**Public, private, protected,deafault**

1. **What is the difference between inner class and subclass?**

An Inner class is a class which is nested within another class. An Inner class has access rights for the class which is nesting it and it can access all variables and methods defined in the outer class.  
 A sub-class is a class which inherits from another class called super class. Sub-class can access all public and protected methods and fields of its super class.

1. **What are Loops in Java? What are three types of loops?**

**There are 3 types of loops in java.**

**Types are:**

**For loop**

**While loop**

**Do while loop**

1. **What is the difference between continue and break statement?**

**The main difference between break and continue is that break is used for immediate termination of the loop.**

**Continue (is used to) terminate the current iteration,and resumes the control of the next iteration of the loop.**

1. **What is the difference between double and float variables in Java?**

**Both Variables are represent floating point numbers,but double variable more precision than float variable.**

**A double variable can provide precision up to 15 to 16 decimal points as compared to a float variable precision 6 to 7 decimal digits.**

1. The double data type is more precise than float in Java.  
     
   2) double takes more space than float in Java. double needs 64-bit storage compare to 32-bit storage of float data type.  
     
   3) double has a higher range than float, sure because it got more bits to store data.  
     
   4) float uses 1 bits for sign, 8 bits for exponent and 23 bits for mantissa, while double uses 1 bits for sign, 11 bits for exponent and 52 bits for mantissa.
2. **What is Final Keyword in Java? Give an example.**

**The final keyword in java is used to restrict the user.Final, non acces modifier can be applicable for only class,methods.variable.**

**When a variable declared in final, its value cant be changed.**

**When a method declared in final, the method cant be overridden.**

**When a class declared in final, the class cant be inherited.**

1. **What is ternary operator? Give an example.**

Java Ternary operator is used as one liner replacement for if-then-else statement and used a lot in java programming. it is the only conditional operator which takes three operands.

Java Ternary Operator Example

**class** OperatorExample{

**public** **static** **void** main(String args[]){

**int** a=2;

**int** b=5;

**int** min=(a<b)?a:b;

System.out.println(min);

}}

1. **What's the base class in Java from which all classes are derived?**

A class that was created based on a previously existing class (**i.e.**, base class). A derived class inherits all of the member variables and methods of the base class from which it is derived.

1. **Can main() method in Java can return any data?**

**No, In java main() method cant return any values.**

Q 1. Can we write a java class with : public static int main(String[] args){

Yes, you can but you can't run that Java class.

Example class:

class MainTest {

public static int main(String[] args) {

return 1;

}

}

You will receive an error message when trying to run it:

Error: Main method must return a value of type void in class MainTest, please

define the main method as:

public static void main(String[] args)

1. **What are Java Packages? What's the significance of packages?**

**Packages is nothing but Collection of similar types of classes, interfaces and subpackages.**

**Two types of packages in java,**

**Build in package, User defined Package.**

**For eg: import.java.util.scanner**

**Java is a top level package**

**Util – subpackage**

**Scanner – class**

1. **What's the difference between an Abstract Class and Interface in Java?**

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|  | **Abstract Class** | **Interface** |
| 1 | An abstract class can extend only one class or one abstract class at a time | An interface can extend any number of interfaces at a time |
| 2 | An abstract class can extend another concrete (regular) class or abstract class | An interface can only extend another interface |
| 3 | An abstract class can have both abstract and concrete methods | An interface can have only abstract methods |
| 4 | In abstract class keyword “abstract” is mandatory to declare a method as an abstract | In an interface keyword “abstract” is optional to declare a method as an abstract |
| 5 | An abstract class can have protected and public abstract methods | An interface can have only have public abstract methods |
| 6 | An abstract class can have static, final or static final variable with any [access specifier](https://beginnersbook.com/2013/05/java-access-modifiers/) | interface can only have public static final (constant) variable |

**13) How can we pass argument to a function by reference instead of pass by value?**

**14) How an object is serialized in java?**

**16) Is it compulsory for a Try Block to be followed by a Catch Block in Java for Exception handling?**

**Yes, in java a try block should be followed by a catch block.**

**17) Is there any way to skip Finally block of exception even if some exception occurs in the exception block?**

**Yes, Finally block is optional,so we can skip the finally block.**

**18) When the constructor of a class is invoked?**

**Once Object Created, then the constructor of a class called**

**19) Can a class have multiple constructors?**

**Yes, A class have multiple constructors.**

**20) Can we override static methods of a class?**

**No,Static methods of a class can’t be override.**

**21) Is String a data type in java?**

**No, String is not a datatype in java.**

**22) In the below example, how many String Objects are created?**

* 1. **String s1="I am Java Expert";**
  2. **String s2="I am C Expert";**
  3. **String s3="I am Java Expert";**

**Ans: There are 2 String Objects are created.**

**23) Why Strings in Java are called as Immutable?**

**Strings are immutable which means the value or data will not change. When we perform an operation on strings we cant change its value, but new object is created.  
Ex:   
String s=new String("ABCD");  
s.concat("EFGH");  
System.out.println(s);  
Output:  
ABCD**

**24) What is multi-threading?**

**The Process of executing multiple threads simultaneously is known as multithreading.**

**In realtime, the multithreading concepts are used in Game applications.**

**25) Why Runnable Interface is used in Java?**

**26) What are the two ways of implementing multi-threading in Java?**

* **By extending Thread class**
* **By Implementing Runnable interface**

**27)When a lot of changes are required in data, which one should be a preference to be used? String or StringBuffer?**

**Ans: StringBuffer**

**28) What's the purpose of using Break in each case of Switch Statement?**

**The break statement is used for immediate termination.**

**29) How we can execute any code even before main method?**

**Yes, we can execute any code before main method by using static block.**

**30) There are two classes named classA and classB. Both classes are in the same package. Can a private member of classA can be accessed by an object of classB?**

**Ans: No, Can’t be accessed.**

**31) Is there a way to increase the size of an array after its declaration?**

**No, There is no way to increase the size of an array after its declaration. but we have one option by using collections,we can increase the size after its declaration.**

**32) I have multiple constructors defined in a class. Is it possible to call a constructor from another constructor's body?**