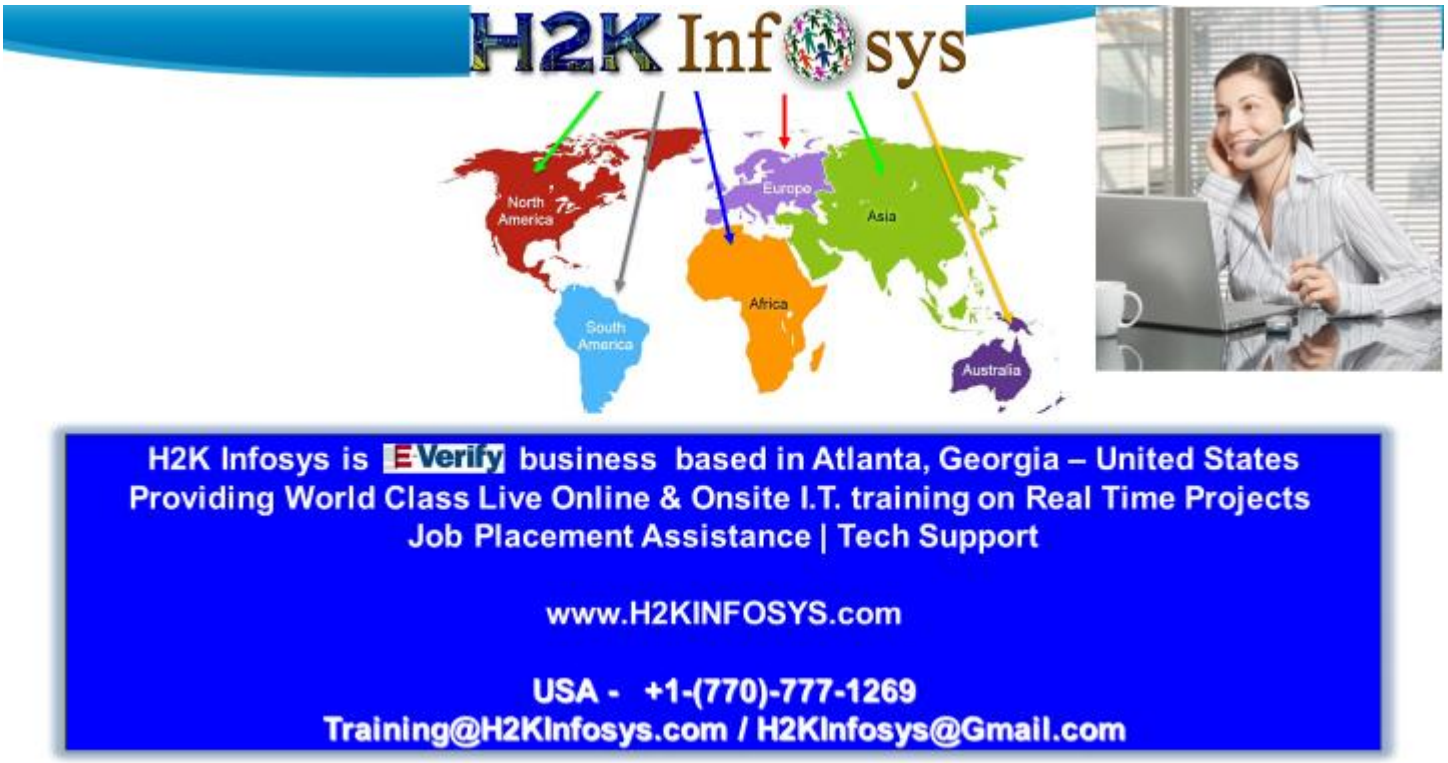

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H2K Infosys, LLC

Dream, Strive & Achieve Victory

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1. **What is the base class of all classes?**
   java.lang.Object

2. **Does Java support multiple inheritance?**
   Java doesn't support multiple inheritance.

3. **What is the purpose of declaring a variable as final?**
   A final variable's value can't be changed. final variables should be initialized before using them.

4. **What is the impact of declaring a method as final?**
   A method declared as final can't be overridden. A sub-class can't have the same method signature with a different implementation.

5. **I don't want my class to be inherited by any other class. What should i do?**
   You should declared your class as final. But you can't define your class as final, if it is an abstract class. A class declared as final can't be extended by any other class.

6. **What is an Abstract Class and what is it's purpose?**

A Class which doesn't provide complete implementation is defined as an abstract class. Abstract classes enforce abstraction.

7. Can a Class extend more than one Class?

Not possible. A Class can extend only one class but can implement any number of Interfaces.

8. Which object oriented Concept is achieved by using overloading and overriding?

Polymorphism.

9. What do you understand by private, protected and public?

These are accessibility modifiers. Private is the most restrictive, while public is the least restrictive. There is no real difference between protected and the default type (also known as package protected) within the context of the same package, however the protected keyword allows visibility to a derived class in a different package.

10. What is the difference between a while statement and a do while statement?

A while statement checks at the beginning of a loop to see whether the next loop iteration should occur. A do while statement checks at the end of a loop to see whether the next iteration of a loop should occur. The do while statement will always execute the body of a loop at least once.

11. If a method is declared as protected, where may the method be accessed?

A protected method may only be accessed by classes or interfaces of the same package or by subclasses of the class in which it is declared.

12. What is the difference between method overriding and overloading?

Overriding is a method with the same name and arguments as in a parent, whereas overloading is the same method name but different arguments

13. What is the difference between a break statement and a continue statement?

A break statement results in the termination of the statement to which it applies (switch, for, do, or while). A continue statement is used to end the current loop iteration and return control to the loop statement.

14. What if I write static public void instead of public static void?

Program compiles and runs properly

15. Explain the Encapsulation principle.

Encapsulation is a process of binding or wrapping the data and the codes that operates on the data into a single entity. This keeps the data safe from outside interface and misuse. Objects allow procedures to be encapsulated with their data to reduce potential interference. One way to think about encapsulation is as a protective wrapper that prevents code and data from being arbitrarily accessed by other code defined outside the wrapper

16. How can one prove that the array is not null but empty?

Print array.length. It will print 0. That means it is empty. But if it would have been null then it would have thrown a NullPointerException on attempting to print array.length

17. Difference between throw and throws in Java?

This Java question belongs to Exception handling category which is another popular category for 2 to 4 years experienced Java programmer. Main difference between these two is that one declares exception thrown by a Java method while other is actually used to throw Exception.

18. How are this() and super() used with constructors?

this() Constructors :

- It is used to pointing the current class instance.
- It can be used with variables or methods.
- It is used to call constructer of same class.
- Private variable cannot be accessed using this().

super() Constructer :

- It is used to call constructor of parent class.
- Must be the first statement in the body of constructor.
- Using this we can access private variables in the super class.

19. What is Constructor?

- A constructor is used to initialize a newly created object.
- It is called just after the memory is allocated for the object.
- It can be used to initialize the objects.
- It is not mandatory to write a constructor for the class.
- Name of constructor is same as the class name.
- They cannot be inherited.
- A constructor is invoked whenever an object of its associated class is created.

20. What are the principle concepts of OOPS?

There are four principle concepts upon which object oriented design and programming test. They are :

1**. Abstraction** :

Abstraction refers to the act of representing essential features without including the background details or explanations.

2. **Polymorphism** :

It is the ability to create a variable, a function, or an object that has more than one form.

3. **Inheritance** :

Inheritance is the process by which objects of one class acquire the properties of objects of another class.

4. **Encapsulation** :

Encapsulation is a technique used for hiding the properties and behaviors of an object and allowing outside access only as appropriate. It prevents other objects from directly altering or accessing the properties or methods of the encapsulated object.

21. What is 'public static void main (String args[ ]) ' signifies?

- The access specifier is the 'public' keyword .
- 'static' keyword allows main() to be called without instantiating a particular instance of a class.
- 'void' affirms the compiler that no value is returned by main().
- 'main()' method is called at the beginning of a Java program.
- 'String args()' tells a parameter named args,which is an instance array of class String.