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| 1. What is Java?  * Java is a high-level programming language and is platform-independent. |
| 1. What is a class?  * Class is a blueprint to create an object. * The class consists of more number of objects. |
| 1. What is an object?  * An object is a real-time entity that consists of its stats and behavior. * An object is an instance of a class. |
| 1. What are variables and types of variables?  * Variables are the container that is stored data value. * Variables are 3 types.  1. **Local variables** - It’s declared inside the methods.   - It’s accessed directly.  - It’s not initiated any default value.  **2.** **Instance variables** - It’s declared inside a class and outside the methods.  - It’s accessed through an object.  - It’s initiated default value. **Global**  **3.** **Static variables** - It’s declared inside a class and outside the methods. **Variables**  - Used a “static” keyword.  - It’s direct access. |
| 1. What is a final variable?  * Any variable is declared with a “Final” keyword it’s called a final variable. |
| 1. What is a method?  * A method is a block of statements that is gets executed whenever it’s called. |
| 1. What is the syntax of methods?  * Access specifier, modifier, return type, method name (arguments)   Access specifier – 4 types (Public, Private, Protected, Default)  Modifier – 2 (Static, Non-static)  Return type – void or int, String, double, long, short, etc.  Arguments – Optional |
| 1. What are datatypes?  * It is defined that what kind of data my variables can be stored. |
| 1. What are types of datatypes?  * 2 types  1. **Primitive Datatypes:** Byte (1 byte), Char (2 bytes), Short (2 bytes), Int (4 bytes), Long (8 bytes), Float (4 bytes), Double (8 bytes), Boolean (1 bit) 2. **Non–Primitive Datatypes:** String, Array, Class, etc.   (1 byte = 8 bits) |
| 1. What are naming conventions?  * The name should not match with keywords. (Class, int, String) * Class – Name should begin with a capital letter. (single word)   - The first letter of every word should begin with a capital letter (multiple words)     * Method – The first letter should begin with a lowercase letter.   - And the first letter of every word should be capitalized.   * Variables – Begin with an alphabet or underscore.   - Should not begin with a digit.  - Should contain alphanumeric but not symbols or spaces expect to underscore.   * Object – Should begin with alphanumeric or underscore. |
| 1. What is Java Buzzword? (Features of Java)  * It’s 9 features of Java.  1. **Platform Independent:** Run in any environment. 2. **Object-oriented:** In Java, everything is based object which has some data and behavior. Java can easily extend as it is based on an object model. 3. **Simple:** It’s is designed to be easy to learn. 4. **Secure:** Secure for internal application. 5. Robust: Early checking of errors, Garbage collector, exception handling (memory management) 6. **Portable:** Java program written in one environment can be executed in another environment. 7. **Multithreading:** Concurrent execution of several parts of the same program at the same time. Improve CPU utilization 8. **Distributed applications:** It’s software that runs on multiple computers to a network at the same time. 9. **Architectural Natural:** Irrespective of architecture the memory allocated to the variables will not vary. |