What is this in JAVA? A blueprint from which individual objects are created.

A. Class

B. Attribute

C. Statement

D. Method

A FOR loop is a predetermined loop.

Select one:

True

False

How would you declare a constant variable called VAT whose value is 0.18?

A. int FINAL VAT = 0.18;

B. final float VAT = 0.18;

C. float final VAT = 0.18;

D. final int VAT = 0.18;

What is this in JAVA? An instance of a class.

A. Object

B. Attribute

C. Statement

D. Method

OOP stands for?

A. Object-Oriented Procedures

B. Object-Oriented Languages

C. Object-Oriented Programming

D. Object-Organized Programming

Select the Java numeric data types from the following:

A. Int

B. Float

C. All answers are correct

D. Long

E. Byte

F. Double

G. Short

A do...while loop will loop 0 or more times.

Select one:

True

False

Which Benefits of Mobile Applications is defined by this? A mobile app user can access and share information anytime or anywhere. Internet connection is not required for most apps.

A. Speed

B. Interactivity

C. Productivity

D. Personalization

E. Convenience

It is a discontinued OS last used by Nokia for their smartphones because they make up the lesser market of mobile operating systems.

A. Blackberry OS

B. Windows OS

C. Symbian OS

D. Chrome OS

What is contained within the manifest xml file in Android project?

A. All answers are correct

B. The list of strings used in the app

C. The source code

D. The permissions the app requires

Canadian computer scientist, best known as the founder and lead designer behind the Java programming language

A. Bjarne Stroustrup

B. Anders Hejlsberg

C. Dennis Ritchie

D. James Arthur Gosling

It is created by Google, is one of the most installed mobile operating system (OS) for mobile devices, with support from various device manufacturers. It is an open-source OS, which means developers are given access to unlocked hardware to develop new programs.

A. Xamarin

B. Linux

C. Android

D. Windows

In Android Studio v 4.0, the group ***res*** contains …

A. All answers are correct

B. Java source code files, separated by package names, including JUnit test code

C. AndroidManifest.xml file

D. All non-code resources, such as XML layouts, UI strings, and bitmap images, divided into corresponding sub-directories

Android is based on which kernel?

A. Linux kernel

B. Hybrid Kernel

C. MAC kernel

D. Windows kernel

Two main  programming languages used to create an app in Android:

A. Java & Kotlin

B. MASM & C

C. Fortran & Smalltalk

D. Swift & Objective-C

What is the attribute that sets the icon for the app in the AndroidManifest.xml file?

A. android:layout\_width

B. android:icon

C. tools:context

D. android:text

Is Android available in ROM?

A. Yes

B. No

What was the latest version of Android OS as of Sept 14, 2020?

A. 13

B. 10

C. 11

D. 12

**Why don't we give min SDK as 1 in Android?**

A. Android doesn't allow min version 1

B. Android deprecated version

C. There is no value for 1

D. Google doesn't allow min version 1

**What is the statement in Java?**

A. It is a small Java program that runs inside the browser and generates dynamic content

B. It is a language feature that assigns a value to a variable, controls a program’s flow by making a decision and/or repeatedly executing another statement, or performs another task

C. It is a combination of literals, variable names, method calls, and operators. At runtime, it evaluates to a value whose type is referred to as the expression’s type.

D. It is a process of executing multiple threads simultaneously

**What is the Java operator?**

A. It is the external file to store variables of the same type

B. It is a language feature that identifies a set of values (and their representation in memory) and a set of operations that transform these values into other values of that set

C. It is a named memory location that stores some type of value

D. It is a sequence of instructions symbolically represented in source code

**What is the purpose of the Java compiler?**

A. To translate source code into instructions (and associated data) that are executed by the virtual machine

B. To convert from one type to another type. For example, we can use this operator to convert from floating-point type to 32-bit integer type.

C. It refers to an operator’s level of importance

D. It provides a secure environment in which code executes. It accomplishes this task in part by using a bytecode verifier to make sure that the classfile’s bytecode is valid.

**What is the default value of local variables?**

A. 0 for integers and 0.0000000001 for the floating-point numbers

B. Only variables of String type have a default value “ “

C. They are not initialized to any default value, neither primitives nor object references

D. They are initialized to any default value, either primitives or object references

**What is Java type?**

A. It is a named memory location that stores some type of value

B. It is a sequence of instructions symbolically represented in source code

C. It is the external file to store variables of the same type

D. It is a language feature that identifies a set of values (and their representation in memory) and a set of operations that transform these values into other values of that set

**What is Java expression?**

A. It is a combination of literals, variable names, method calls, and operators. At runtime, it evaluates to a value whose type is referred to as the expression’s type.

B. It is a process of executing multiple threads simultaneously

C. It is a language feature that assigns a value to a variable, controls a program’s flow by making a decision and/or repeatedly executing another statement, or performs another task

D. It is a small Java program that runs inside the browser and generates dynamic content

**What is the Java identifier?**

A. It is a language feature that consists of letters (A-Z, a-z, or equivalent uppercase/lowercase letters in other human alphabets), digits (0-9 or equivalent digits in other human alphabets), connecting punctuation characters (such as the underscore), and currency symbols (such as the dollar sign, $). This name must begin with a letter, a currency symbol, or a connecting punctuation character; and its length cannot exceed the line in which it appears.

B. It is the external file to store variables of the same type

C. It is a sequence of instructions symbolically represented in source code

D. It is a named memory location that stores some type of value

**Java has the following types of variables...**

A. Local, instance, and class/static

B. Integer and floating-point

C. Classes, objects, and static

D. String and character

**What is the statement in Java?**

A. It is a combination of literals, variable names, method calls, and operators. At runtime, it evaluates to a value whose type is referred to as the expression’s type.

B. It is a process of executing multiple threads simultaneously

C. It is a small Java program that runs inside the browser and generates dynamic content

D. It is a language feature that assigns a value to a variable, controls a program’s flow by making a decision and/or repeatedly executing another statement, or performs another task

**What is the default value of the instance variables?**

A. They are initialized to any default value, either primitives or object references

B. They are not initialized to any default value, neither primitives nor object references

C. Only variables of String type have a default value “ “

D. For numbers, the default value is 0, for Booleans it is false, and for object references it is null. Values can be assigned during the declaration or within the constructor

**Definition of the array type...**

A. It is a type that’s defined by the language and whose values are not objects

B. It is a type that handles links to the objects, so we can access them and make some changes to the object's state

C. It is a special reference type that signifies an array, a region of memory that stores values in equal-size and contiguous slots, which are commonly referred to as elements

D. It is a type that’s defined by the developer using a class, an interface, an enum, or an annotation type and whose values are objects

**What is the Java expression?**

A. It is a process of executing multiple threads simultaneously

B. It is a small Java program that runs inside the browser and generates dynamic content

C. It is a language feature that assigns a value to a variable, controls a program’s flow by making a decision and/or repeatedly executing another statement, or performs another task

D. It is a combination of literals, variable names, method calls, and operators. At runtime, it evaluates to a value whose type is referred to as the expression’s type

**What is a type in Java?**

A. It is a sequence of instructions symbolically represented in source code

B. It is a named memory location that stores some type of value

C. It is the external file to store variables of the same type

D. It is a language feature that identifies a set of values (and their representation in memory) and a set of operations that transform these values into other values of that set.

**True or false: Java is a case-insensitive language.**

Select one:

True

False

**The Java bitwise operators are ...**

A. Bitwise AND (&), bitwise complement (~), bitwise exclusive OR (^), and bitwise inclusive OR (|)

B. Bit shift left, bit shift right, two bits shift left, and two bits shift right

C. Bitwise AND (&&), bitwise complement (~~), bitwise exclusive OR (^^), and bitwise inclusive OR (||)

D. Addition, subtraction, multiplication, and division

**The data in the Firebase Realtime Database is stored using \_\_\_**

A. REST (REpresentational State Transfer)

B. Structured Query Language

C. SSD and HDD

D. JSON tree with multiple nodes

**NoSQL databases are used to store \_\_\_**

A. Unstructured data, semi-structured data

B. Structured data

C. Table

D. All answers are correct

**Firebase client is added to an application by including \_\_\_**

A. Relevant Firebase library

B. Connecting to the Node.js server

C. Starting JavaScript code on the Firebase server

D. Opening Google account

**Android Studio builds an output file \_\_\_ that can be run on the smartphone.**

A. apk

B. com

C. exe

D. html

**What is JSON?**

A. It is often used when data is sent from a server to a web page

B. It is a lightweight format for storing and transporting data

C. All answers are correct

D. It is JavaScript Object Notation

**What are the key feature(s) of Firebase?**

A. Authentication, Realtime database, Hosting, Test lab, Notifications

B. All answers are correct

C. Waterfall, Iterative, Component-based, and Extreme programming development models

D. It can be run on the server and client both

**What is Firebase?**

A. It is a Backend-as-a-Service (Baas). It provides developers with a variety of tools and services to help them develop quality apps and grow their user base. It is built on Google’s infrastructure. It is categorized as a NoSQL database program, which stores data in JSON-like documents.

B. It is a domain-specific language used in programming and designed for managing data held in a relational database management system, or for stream processing in a relational data stream management system

C. It is a brand name for a group of server operating systems released by Microsoft

D. It is a programming language that conforms to the ECMAScript specification. It is high-level, often just-in-time compiled, and multi-paradigm.

**What is Firebase Realtime database?**

A. It supports authentication using passwords, phone numbers, Google, Facebook, Twitter, and more

B. It is a cloud-hosted database. Data is stored as JSON and synchronized in real-time to every connected client. When we build cross-platform apps with our iOS, Android, and JavaScript SDKs, all of our clients share one Realtime Database instance and automatically receive updates with the newest data.

C. It provides fast hosting for a web app; content is cached into content delivery networks worldwide

D. It is a Backend-as-a-Service (Baas). It provides developers with a variety of tools and services to help them develop quality apps and grow their user base. It is built on Google’s infrastructure. It is categorized as a NoSQL database program, which stores data in JSON-like documents.

**What is the onCreate() callback (i.e. event) in the Android app lifecycle?**

A. This callback is called when the activity becomes visible to the user

B. This callback is called when the activity is no longer visible

C. This is the first callback and called when the activity is first created

D. This is called when the user starts interacting with the application

**What is the activity in the Android app?**

A. It provides a secure environment where code executes. It accomplishes this task in part by using a bytecode verifier to make sure that the classfile’s bytecode is valid.

B. It represents a single screen with a user interface just like window or frame of Java

C. It is a development framework consisting of a project manager for managing a project’s files, a text editor for entering and editing source code, a debugger for locating bugs, and other features

D. It is an object that provides runtime binding between separate components, such as two activities

**What is the finally block in the try-catch handler?**

A. It is a development framework consisting of a project manager for managing a project’s files, a text editor for entering and editing source code, a debugger for locating bugs, and other features

B. It is a mechanism to handle runtime errors. It is mainly used to handle checked exceptions.

C. It is a block that is always executed

D. It is a software development kit that provides tools (including a compiler) for developing Java programs. It also provides a private JRE for running these programs.

**What is the difference between break and continue statements in Java?**

A. The first one is used for the switch statement, the second one is used for the loops

B. The first one transfers execution to the first statement following a switch statement or a loop, whereas the second one skips the remainder of the current loop iteration, reevaluates the loop’s Boolean expression, and performs another iteration (when true) or terminates the loop (when false)

C. The second one transfers execution to the first statement following a switch statement or a loop, whereas the first one skips the remainder of the current loop iteration, reevaluates the loop’s Boolean expression, and performs another iteration (when true) or terminates the loop (when false)

D. The first one is used for the loops, the second one is used for the switch statement

**An example of the declaration of the zero-based Java jagged array is as follows...**

A. float[] matrix = new float [2,0];

B. float[2,0] matrix = new float [2,0];

C. float[][] matrix = new float [2][];

D. float[][] matrix = new float [2][2];

**What is the purpose of the cast operator?**

A. It provides a secure environment where code executes. It accomplishes this task in part by using a bytecode verifier to make sure that the classfile’s bytecode is valid.

B. To convert from one type to another type. For instance, we can use this operator to convert from floating-point type to 32-bit integer type.

C. It refers to an operator’s level of importance

D. To translate source code into instructions (and associated data) that are executed by the virtual machine

**What is the intent in the Android app?**

A. It is an object that provides runtime binding between separate components, such as two activities

B. It represents a single screen with a user interface just like window or frame of Java

C. It is a development framework consisting of a project manager for managing a project’s files, a text editor for entering and editing source code, a debugger for locating bugs, and other features

D. It provides a secure environment where code executes. It accomplishes this task in part by using a bytecode verifier to make sure that the classfile’s bytecode is valid.

**What is the difference between while and do-while loops in Java?**

A. The first one evaluates its Boolean expression at the bottom of the loop, whereas the second one evaluates its Boolean expression at the top of the loop. As a result, the first loop executes one or more times, whereas the second loop executes zero or more times.

B. The first one evaluates its Boolean expression at the top of the loop, whereas the second one evaluates its Boolean expression at the bottom of the loop. As a result, the first loop executes one or more times, whereas the second loop executes zero or more times.

C. The first one evaluates its Boolean expression at the top of the loop, whereas the second one evaluates its Boolean expression at the bottom of the loop. As a result, the first loop executes zero or more times, whereas the second loop executes one or more times.

D. The first one evaluates its Boolean expression at the bottom of the loop, whereas the second one evaluates its Boolean expression at the top of the loop. As a result, the first loop executes zero or more times, whereas the second loop executes one or more times.