1. If the catch exception do not match the throwed exception then what happens and what is its solution?

Ans : It will result in error. We can catch a common exception and print it in the catch block.

1. What lang to learn for android?

Ans : Java – Java is an official language of Android development and is supported by Android studio.

Kotlin – Kotlin is another official Android language. It is similar to Java in many ways but is a little easier to get your head around.

C++ — Android Studio also supports C++ with the use of the Java NDK. This allows for native coding applications, which can be handy for things like games.

C# — C# is a more beginner-friendly alternative to C or C++ that obfuscates more code. It is also a little less difficult than Java, though the two languages are extremely similar. It’s supported by some very handy tools like Unity and Xamarin, which are great for game development and cross-platform development. C# with Unity is the best option for many mobile game developers.

LUA (Corona) – Another cross-platform tool built on LUA. It massively simplifies the app-building process while stilling allowing you to call native libraries.

JavaScript (PhoneGap) – If you already know how to build interactive web pages, then you can use this knowledge with PhoneGap to build a more basic cross-platform app.

1. What is cloud from AWS and cloud services from Microsoft and google

Cloud computing is the on-demand delivery of IT resources over the Internet with pay-as-you-go pricing. Instead of buying, owning, and maintaining physical data centers and servers, you can access technology services, such as computing power, storage, and databases, on an as-needed basis from a cloud provider like Amazon Web Services (AWS).

SaaS

The most widely recognized type of cloud service is known as [software as a service, or SaaS](https://www.citrix.com/solutions/digital-workspace/what-is-software-as-a-service.html). This broad category encompasses a variety of services, such as file storage and backup, web-based email, and project management tools.

Examples of SaaS cloud service providers include Dropbox, G Suite, Microsoft Office 365, Slack and Citrix Content Collaboration. In each of these applications, users can access, share, store, and secure information in “the cloud.”

IaaS

Infrastructure as a service, or IaaS, provides the infrastructure that many cloud service providers need to manage SaaS tools—but don’t want to maintain themselves. It serves as the complete datacenter framework, eliminating the need for resource-intensive, on-site installations.

Examples of IaaS are Amazon Web Services (AWS), Microsoft Azure and Google Compute Engine. These providers maintain all storage servers and networking hardware, and may also offer load balancing, application firewalls, and more. Many well-known SaaS providers run on IaaS platforms.

PaaS

The cloud service model known as platform as a service, or PaaS, serves as a web-based environment where developers can build cloud apps. PaaS provides a database, operating system and programming language that organizations can use to develop cloud-based software, without having to maintain the underlying elements.

Many IaaS vendors, including the examples listed above, also offer PaaS capabilities.

1. What is HTML, CSS and JavaScript and write a hello world program in html.

Html

The HTML (HyperText Markup Language) is the main programming language for web development. It defines the basic structure of a site, such as texts, heading, paragraphs, lists e.t.c

The HTML language is formed from a bunch of established tags, which represent a variety of functions that are then "translated" into readable information on the screen. Tags are separated by angle brackets.

CSS (Cascading Style Sheets) is a way to specify how HTML elements will appear on a webpage. This style sheet can be used to apply RGB values, border colors, background images, and other formatting to a website.

CSS defines a set of rules, which include a number of properties and their values.

JavaScript allows you to control the behaviour of your web page. The language offers a low entry barrier and immediate results based on the success of your code, making it one of the most popular and widely used programming languages globally.

JavaScript lets users interact with websites by manipulating HTML and CSS. For example, clicking a button, scrolling to the bottom of the page, or displaying photos in a carousel move.

5. Difference between java and JavaScript.

**1.**It is a Programming language.It is a scripting language.

**2.**Java is a pure Object Oriented Programming Language. JavaScript is Object-Based Language.

**3.**Java is a Standalone language. JavaScript is not a standalone language, as it needs to be integrated into an HTML program for execution.

**4.**Java is a strongly typed language, which means that the user has to decide the data type of the variable before declaring and using it.

**5.**Java program should be compiled before execution. JavaScript needs to be integrated into the HTML program for the execution.

**6.**The web-browser is not required to run java programs. The web-browser is essential to run the JavaScript programs.

**7.**It is one of the complex languages to learn. It one of the easy languages to learn.

**8.**In Java, by utilizing the Multi-threading, users can perform complicated tasks. In JavaScript, user is not able to perform complicated tasks.

**9.**It requires a large amount of memory. It does not require that amount of memory.

**11.**In Java programming language, programs are saved with the ".java" extension. On the other hand, programs in JavaScript are saved with the ".js" extension.

1. What are the information passed in the header once we hit Google.com.

Ans : Google's response header would be read by the browser, cached according to the response header caching policy, then the body would be un-zipped. And because it's google it's probably ultra-optimized: minified, likely a lot of pre-rendered content, inlined CSS, JavaScript and images to reduce network requests and the time-to-first-render.

1. What are cookies and write a java code to display all the cookies in your browser.

Ans : Cookies are small files which are stored on a user's computer. They are designed to hold a modest amount of data specific to a particular client and website, and can be accessed either by the web server or the client computer. This allows the server to deliver a page tailored to a particular user, or the page itself can contain some script which is aware of the data in the cookie and so is able to carry information from one visit to the website (or related site) to the next.

1. Even if we close the browser and open it again we are still logged in, how is it possible.

Ans : It is due to cookies.

* Site accessed for first time by user, user logs in (cookie written to browser set to expire in 7 days)
* User remains logged in but closes browser (cookie still exists in browser)
* User returns to site within 30 mins and they are still logged in (cookie updated in browser)
* User remains logged in but closes browser again.
* Browser opened more than 30 mins later (cookie still exists in browser)
* Site then accessed after 30 mins, user appears to have been logged out (cookie has been deleted in browser)

1. What does JavaScript do and understand how react, angular and JavaScript work and their differences.

Ans : JavaScript is a scripting language for creating dynamic web page content. It creates elements for improving site visitors’ interaction with web pages, such as dropdown menus, animated graphics, and dynamic background colors.

React and Angular are both open source frontend development tools based around JavaScript – or in Angular’s case, TypeScript, a JavaScript superset that adds optional static typing to the language.

Angular is a front end development framework based on JavaScript.

Angular is the oldest, developed in 2010 by Google. It is a JavaScript framework that is based on TypeScript.

1. What is ORM and hibernate

Ans : ORM stands for **O**bject-**R**elational **M**apping (ORM) is a programming technique for converting data between relational databases and object oriented programming languages such as Java, C#, etc.

There are several persistent frameworks and ORM options in Java. A persistent framework is an ORM service that stores and retrieves objects into a relational database, Hibernate is one among them.

1. What are external libraries

Ans : External libraries fill gaps in the Java core libraries. Java comes with a core set of libraries, including those that define commonly used data types and related behavior, like String or Date; utilities to interact with the host operating system, such as System or File; and useful subsystems to manage security, deal with network communications, and create or parse XML.

1. What is a framework

Ans : A framework is a structure that you can build software on. It serves as a foundation, so you're not starting entirely from scratch. Frameworks are typically associated with a specific programming language and are suited to different types of tasks.

1. Implement vs extends

Ans : When a subclass extends another class, it allows the subclass to inherit (ie. reuse) and override code defined in the supertype. In simple terms, using extends keyword, a newly created class (subclass) can inherit the features of an existing class (superclass). Also, it can override the methods defined in a superclass.

When a class implements an interface, it has to provide an implementation of all methods declared inside an interface. If the class doesn’t wish to provide implementation, it can declare itself as an abstract class. Also, an interface can never implement another interface as implementing means defining the methods and interface always have abstract methods so an interface can never implement another interface.

1. Spring boot vs Spring frame work

Ans : The Spring frame work offers us a robust programming and configuration model for practical java-based business applications despite the deployment platform. It is one of the most commonly used java EE frameworks, which offers an elaborate environment for programming and configuration.

Although the Spring Framework focuses on giving you versatility, Spring Boot aims to reduce the length of the code and provide you with the simplest way to build a web application. Spring Boot optimizes the dependencies of Spring and operates applications from a command line directly. Not only does it require an application container, such as Spring, but it also assists in controlling and externally configuring multiple parts.

1. Overloading vs overriding

Ans :

|  |  |  |
| --- | --- | --- |
|  | Method overloading is used *to increase the readability* of the program. | Method overriding is used *to provide*  *the specific implementation* of the method  that is already provided by its super class. |
|  | Method overloading is performed *within class*. | Method overriding occurs *in two classes*  that have IS-A (inheritance) relationship. |
|  | In case of method overloading, *parameter must be different*. | In case of method overriding,  *parameter must be same*. |
|  | Method overloading is the example of *compile time polymorphism*. | Method overriding is the  example of *run time polymorphism*. |
|  | In java, method overloading can't be performed by changing return type of the method only. *Return type can be same or different* in method overloading. But you must have to change the parameter. | *Return type must be same or*  *covariant* in method overriding. |

16. Keyword to create relation between :-

1.Abstract and interface

2.Class and class

3.Class and interface

4.Abstract and class

Ans : 1. The keyword ‘**abstract’** is a non-access modifier and is used for both abstract classes and abstract methods to achieve abstraction. Interface itself helps in achieving the abstraction. So we use implements.

2.we use extends keyword.

3.We use implements.

4.We use extends keyword.

17.What is the default access for the variables and function define in Java 7

Ans : When we do not mention any access modifier, it is called default access modifier. The scope of this modifier is limited to the package only. This means that if we have a class with the default access modifier in a package, only those classes that are in this package can access this class. No other class outside this package can access this class. Similarly, if we have a default method or data member in a class, it would not be visible in the class of another package.

18. How many types of file format is there ?

Ans : Image files: **Joint photographic experts group (JPEG or JPG), Graphics interchange format (GIF), Scalable vector graphics (SVG), Portable networks graphic (PNG), Tagged image file format (TIFF or TIF).**

**Document files : Portable document format (PDF), Word document (DOC and DOCX), Hypertext markup language (HTML and HTM), Microsoft excel spreadsheet file (XLS and XLSX), Text file (TXT)**

**Video files : Moving picture experts group layer four (MP4), Audio video interleave (AVI), QuickTime Movie file (MOV), Flash video format (FLV), Advanced video coding, high definition (AVCHD)**

**Presentation files : PowerPoint presentation (PPT or PPTX), Open document presentation (ODP), Apple Keynote file (KEY)**

**Audio files : MPEG 4 audio (M4A), MPEG layer audio 3 (MP3), Waveform audio file (WAV)**

19. Example of rdbms and non rdbms

Ans : In a relational database like SQL Server or Oracle, a database is collection of tables i.e it contains one or more tables and it is these tables that store data. Simply put, a relational database is a collection of one or more tables.

In a non-relational database like MongoDB for example, we do not have tables, instead we have Collections and Documents. A collection, as the name implies, is a collection of one or more documents. If you are from a relational database background, you can think of a collection as a table and documents as table rows.

20. Does python has a support to db2

Ans : there are additional Python database interfaces which make use of existing JDBC or ODBC drivers which can be used to connect to Db2.

21. Diff Between Linux OS and windows OS.

Ans : It is an open-source and free operating system (OS) that provides its users with c compatibility with the user interface and programming interface. It is based on the Unix standards and consists of many elements that are developed separately.

It is a licensed OS with an inaccessible source code. Windows works pretty well for all users who have very little to no computer knowledge. It is good for commercial use among businesses as well as for personal use- because it is very straightforward and easy to use.

There is a basic difference between Linux and Windows. Windows comes in a marketable package, while Linux is free from any price. Thus, Windows is expensive. Also, the Linux package is open supply. It means that the users can get access to the ASCII text file for improving the system’s code victimization. Conversely, the users can’t accept ASCII files in Windows. The OS is authorized.