**JavaScript?**

**What are JavaScript types?**

Following are the JavaScript types:

* Number
* String
* Boolean
* Function
* Object
* Null
* Undefined

**What is the use of isNaN function?**

isNan function returns true if the argument is not a number otherwise it is false.

**What is negative infinity?**

Negative Infinity is a number in JavaScript which can be derived by dividing negative number by zero.

**Which company developed JavaScript?**

Netscape is the software company who developed JavaScript.

**What is a prompt box?**

A prompt box is a box which allows the user to enter input by providing a text box.  Label and box will be provided to enter the text or number.

**What is ‘this’ keyword in JavaScript?**

‘This’ keyword refers to the object from where it was called.

**Which symbol is used for comments in Javascript?**

// for Single line comments and

/\*   Multi

Line

Comment

\*/

**What is === operator?**

=== is called as strict equality operator which returns true when the two operands are having the same value without any type conversion.

**Explain how can you submit a form using JavaScript?**

To submit a form using JavaScript use document.form[0].submit();

document.form[0].submit();

**Does JavaScript support automatic type conversion?**

Yes JavaScript does support automatic type conversion, it is the common way of type conversion used by JavaScript developers

**Explain how to read and write a file using JavaScript?**

There are two ways to read and write a file using JavaScript

* Using JavaScript extensions
* Using a web page and Active X objects

**What are all the looping structures in JavaScript?**

Following are looping structures in Javascript:

* For
* While
* do-while loops

**Explain the difference between “==” and “===”?**

“==” checks only for equality in value whereas “===” is a stricter equality test and returns false if either the value or the type of the two variables are different.

**What would be the result of 3+2+”7″?**

Since 3 and 2 are integers, they will be added numerically. And since 7 is a string, its concatenation will be done. So the result would be 57.

**Explain how to detect the operating system on the client machine?**

In order to detect the operating system on the client machine, the navigator.appVersion string (property) should be used.

**What do mean by NULL in Javascript?**

The NULL value is used to represent no value or no object.  It implies no object or null string, no valid boolean value, no number and no array object.

**What is the function of delete operator?**

The functionality of delete operator is used to delete all variables and objects in a program but it cannot delete variables declared with VAR keyword.

**What are all the types of Pop up boxes available in JavaScript?**

* Alert
* Confirm and
* Prompt

**What is the use of Void(0)?**

Void(0) is used to prevent the page from refreshing and parameter “zero” is passed while calling.

Void(0) is used to call another method without refreshing the page.

**What is the data type of variables of in JavaScript?**

All variables in the JavaScript are object data types.

**What is the difference between an alert box and a confirmation box?**

An alert box displays only one button which is the OK button.

But a Confirmation box displays two buttons namely OK and cancel.

**Whether JavaScript has concept level scope?**

No. JavaScript does not have concept level scope. The variable declared inside the function has scope inside the function.

**What is break and continue statements?**

Break statement exits from the current loop.

Continue statement continues with next statement of the loop.

**What are the two basic groups of dataypes in JavaScript?**

They are as –

* Primitive
* Reference types.

Primitive types are number and Boolean data types. Reference types are more complex types like strings and dates.

**What is the use of type of operator?**

‘Typeof’ is an operator which is used to return a string description of the type of a variable.

**Which keyword is used to print the text in the screen?**

document.write(“Welcome”) is used to print the text – Welcome in the screen.

**What is the use of blur function?**

Blur function is used to remove the focus from the specified object.

**How to find operating system in the client machine using JavaScript?**

The ‘**Navigator.appversion’** is used to find the name of the operating system in the client machine.

HTML

**Do all HTML tags come in pair?**

No, there are single HTML tags that does not need a closing tag. Examples are the <img> tag and <br> tags.

**How do you insert a comment in html?**

Comments in html begins with “<!–“nd ends with “–>”. For example:

|  |  |
| --- | --- |
| 1 | <!-- A SAMPLE COMMENT --> |

**9) Can attribute values be set to anything or are there specific values that they accept?**

Some attribute values can be set to only predefined values. Other attributes can accept any numerical value that represents the number of pixels for a size.

**10) How do you insert a copyright symbol on a browser page?**

To insert the copyright symbol, you need to type &copy; or & #169; in an HTML file.

**5) Do older html files work on newer browsers?**

Yes, older html files are compliant to the HTML standard. Most older files work on the newer browsers, though some features may not work.

**7) If the user’s operating system does not support the needed character, how can the symbol be represented?**

In cases wherein their operating system does not support a particular character, it is still possible to display that character by showing it as an image instead.

**18) How do you change the number type in the middle of a list?**

The <li> tag includes two attributes – type and value. The type attribute can be used to change the numbering type for any list item. The value attribute can change the number index.

**20) What bullet types are available?**

With ordered lists, you can select to use a number of different list types including alphabetical and Roman numerals. The type attribute for unordered lists can be set to disc, square, or circle.

**25) What will happen if you overlap sets of tags?**

If two sets of html tags are overlapped, only the first tag will be recognized. You will recognize this problem when the text does not display properly on the browser screen.

**28) Is it possible to set specific colors for table borders?**

You can specify a border color using style sheets, but the colors for a table that does not use style sheets will be the same as the text color.

**30) What other ways can be used to align images and wrap text?**

Tables can be used to position text and images. Another useful way to wrap text around an image is to use style sheets.

**31) Can a single text link point to two different web pages?**

No. The <a> tag can accept only a single href attribute, and it can point to only a single web page.

**32) What is the difference between the directory and menu lists and the unordered list?**

The key differences is that the directory and menu lists do not include attributes for changing the bullet style.

CSS

**to apply CSS styles to a Web page:**

* **Inline:** Though this method often goes against best practices, it’s easily done by inserting a ‘style’ attribute inside an HTML element:
  + e.g.) <p style=”color:blue”>Lorem Ipsum</p>
* **Embedded/Internal:** Done by defining the head of an HTML document by wrapping characteristics in a <style> tag.
* **Linked/External:** CSS is placed in an external .css file, and linked to the HTML document with a <link> tag. This can also be accomplished using the ‘@import’, however, this can slow page load time and is generally not advised.

## 4.Do you use grid systems, and if so, what do you prefer?

* + Again, no correct answer here. Just be able to discuss the pros and cons of different grid systems, mobile-first, fluid and responsive web design issues.

5.

advantages of using CSS –

**CSS saves time , Pages load faster , Easy maintenance**  , **Superior styles to HTML , Multiple Device Compatibility , Global web standards , Offline Browsing , Platform Independence**

7.Which property is used to change the face of a font?

The font-family property is used to change the face of a font.

8.Which property is used to indent the text of a paragraph?

The text-indent property is used to indent the text of a paragraph.

9.Which property is used to control the flow and formatting of text?

The white-space property is used to control the flow and formatting of text.

**3. What are the different variations of CSS ?**  
The variations for CSS are:

* CSS 1
* CSS 2
* CSS 2.1
* CSS 3
* CSS 4

**8. Who maintains the CSS specifications?**

* World Wide Web Consortium maintains the CSS specifications.

**39. How can backward compatibility be designed in CSS?**

HTML sheet methods is collaborated with CSS and used accordingly.

JAVA

**What is Collection ? Collection :** A collection (also called as container) is an object  that groups multiple elements into a single unit.

**What is a Collections Framework ? Collections Framework :**Collections framework provides unified architecture for manipulating and representing collections.

**Q3 What is the difference between Collection and Collections ?**  
  
Collection is  an interface while Collections is a java class , both are present in java.util package and  part of java collections framework.

**Q4 Which collection classes are synchronized or thread-safe ?**  
  
Stack, Properties , Vector and Hashtable can be used in multi threaded environment because they are synchronized classes (or thread-safe).

**Q7 What is the difference between Map and Set ?**  
  
Map object has unique keys each containing some value, while Set contain only unique values.  
  
**Q8 What are the classes implementing List and Set interface ?**  
  
***Class implementing List interface :***  ArrayList , Vector , LinkedList ,  
  
***Class implementing Set interface :***HashSet , TreeSet

**Q7 What is an iterator ?**  
  
Iterator is an interface . It is found in java.util package. It provides methods to iterate over any Collection.

**Q12 Which methods you need to override to use any object as key in HashMap ?**  
  
To use any object as key in HashMap , it needs to implement equals() and hashCode() method .

**Q14 How to reverse the List in Collections ?**  
  
There is a built in reverse method in Collections class . reverse(List list) accepts list as parameter.  
  
**Collections.reverse(listobject);**

**Q19 What is the difference between Iterator and ListIterator.**  
  
Using Iterator we can traverse the list of objects in forward direction . But ListIterator can traverse the collection in both directions that is forward as well as backward.

**Q22 Write java code showing insertion,deletion and retrieval of HashMap object ?**  
  
Do it yourself (DIY) , if found any difficulty or doubts then please mention in the comments.

**Q12 How HashSet works internally in java ?**  
  
This is one of the popular interview question . HashSet internally uses HashMap to maintain the uniqueness of elements. We have already discussed in detail [hashset internal working in java](http://javahungry.blogspot.co.uk/2013/08/how-sets-are-implemented-internally-in.html).

**Q34 How remove(key) method works in HashMap ?**  
  
This is the new question which is getting popular among java interviewers . We have shared the detailed explanation here [how remove method works internally in java](http://javahungry.blogspot.co.uk/2015/03/how-remove-method-internally-works-in-hashmap-java.html).

**Q36 How TreeMap works in Java ?**  
  
TreeMap internally uses Red-Black tree to sort the elements in natural order. Please find the detailed answers here [internal implementation of TreeMap in java](http://javahungry.blogspot.co.uk/2014/06/how-treemap-works-ten-treemap-java-interview-questions.html) .

**Q39 How ConcurrentHashMap works internally in Java?**  
  
The detailed answer is already explained here  [internal implementation of concurrenthashmap](http://javahungry.blogspot.co.uk/2015/02/how-concurrenthashmap-works-in-java-internal-implementation.html)

**Q41 What is hash-collision in Hashtable ? How it was handled in Java?**  
  
In Hashtable , if two different keys have the same hash value then it lead to hash -collision. A bucket of type linkedlist used to hold the different keys of same hash value.

**Q45 How do you convert a given Collection to SynchronizedCollection ?**  
One line code :    Collections.synchronizedCollection(Collection collectionObj) will convert a given collection to synchronized collection.

**3. What’s the purpose of Static methods and static variables?**

Ans: When there is a requirement to share a method or a variable between multiple objects of a class instead of creating separate copies for each object, we use static keyword to make a method or variable shared for all objects.

**Q19. What is data encapsulation and what’s its significance?**

Ans: Encapsulation is a concept in Object Oriented Programming for combining properties and methods in a single unit.

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

Ans: java.lang.object

**Q15. Can main() method in Java can return any data?**

Ans: In java, main() method can’t return any data and hence, it’s always declared with a void return type.

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

Ans:  In java, we can pass argument to a function only by value and not by reference.

**34. What’s the difference between an array and Vector?**

Ans: An array groups data of same primitive type and is static in nature while vectors are dynamic in nature and can hold data of different data types.

**Q35. What is multi-threading?**

Ans: Multi threading is a programming concept to run multiple tasks in a concurrent manner within a single program. Threads share same process stack and running in parallel. It  helps  in performance improvement of any program.

**Q36. Why Runnable Interface is used in Java?**

Ans: Runnable interface is used in java for implementing multi threaded applications. Java.Lang.Runnable interface is implemented by a class to support multi threading.

**How garbage collection is done in Java?**

Ans: In java, when an object is not referenced any more, garbage collection takes place and the object is destroyed automatically. For automatic garbage collection java calls either System.gc() method or Runtime.gc() method.

**How objects of a class are created if no constructor is defined in the class?**

Ans: Even if no explicit constructor is defined in a java class, objects get created successfully as a default  constructor is implicitly used for object creation. This constructor has no parameters.

**Give an example of use of Pointers in Java class.**

Ans: There are no pointers in Java. So we can’t use concept of pointers in Java.

**Can variables be used in Java without initialization?**

Ans: In Java, if a variable is used in a code without prior initialization by a valid value, program doesn’t compile and gives an error as no default value is assigned to variables in Java.

**Q30. Can a class in Java be inherited from more than one class?**

Ans: In Java, a class can be derived from only one class and not from multiple classes. Multiple inheritances is not supported by Java.

**an we use goto in Java to go to a particular line?**

Ans: In Java, there is not goto keyword and java doesn’t support this feature of going to a particular labeled line.

**Q69. Can a dead thread be started again?**

Ans: In java, a thread which is in dead state can’t be started again. There is no way to restart a dead thread.

**Can a variable be local and static at the same time?**

Ans:  No a variable can’t be static as well as local at the same time. Defining a local variable as static gives compilation error.

**What is a Local class in Java?**

Ans: In Java, if we define a new class inside a particular block, it’s called a local class. Such a class has local scope and isn’t usable outside the block where its defined.

**What’s the base class of all exception classes?**

Ans: In Java, **Java.Lang.throwable** is the super class of all exception classes and all exception classes are derived from this base class.

**Whether JavaScript has concept level scope?**

No. JavaScript does not have concept level scope. The variable declared inside the function has scope inside the function.

**. What is break and continue statements?**

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**What is Thread in java?**

Answer.

* Threads consumes CPU in best possible manner, hence enables multi processing. Multi threading reduces idle time of CPU which improves performance of application.

40.

**What is difference between Process and Thread in java?**

* Answer.  One process can have multiple Threads,
* Thread are subdivision of Process.