**Recursion**

**Errors**

**What is the difference between compile time errors and runtime errors?**

Compile time error is any type of error that prevent a java program compile like a syntax error, a class not found, a bad file name for the defined class, a possible loss of precision when you are mixing different java data types and so on. A runtime error means an error which happens, while the program is running.

**Is syntax error a runtime error? Why?**

For compiled languages, syntax errors are detected at compile-time. A program will not compile until all syntax errors are corrected.

**Is semantic error a runtime error? Why?**

Writing invalid program logic that produces incorrect results when the instructions are executed. The syntax of the source code may be valid, but the algorithm being employed is not.

**Exception handling**

**What are the Exceptions?**

When an error occurs within a method, the method creates an object and hands it off to the runtime system. ... This block of code is called an exception handler.

What kind of Exceptions do we have in Java?

What are the checked and unchecked exceptions

Can I throw exceptions?

Can I handle these exceptions?

What is the try block used for?

What is the catch block used for?

Can I handle different kind of errors?

What is the point of the finally block?

Is it executed even if I return from the try block?

**File IO**

**What is the File System?**

The default file system, obtained by invoking the FileSystems.getDefault method, provides access to the file system that is accessible to the Java virtual machine

What is a file path?

What is the difference between relative and absolute path?

What is character encoding?

What is UTF-8?

What are file permissions?

What is the nio package in Java?

How can I access a file? What does the Path class do?

What is the Files class in the nio package?

How can I read a file?

How can I write a file?

How can I append something to a file?

What happens if a file was not found?