

43 Lecture - CS304

Important Subjective

1. What is abnormal termination in computer programming?

Abnormal termination refers to the unexpected termination of a program due to an error or exception. It occurs when a program encounters an unforeseen problem and cannot continue to execute normally.

What is the difference between an exception and an error?

An error is a problem that occurs at runtime and halts program execution, while an exception is a problem that occurs at runtime but can be handled by the program through the use of exception handling techniques.

What is the purpose of exception handling?

The purpose of exception handling is to provide a mechanism for handling errors and exceptions in a program gracefully. It allows the program to detect and respond to errors without crashing or terminating unexpectedly.

What is a try-catch block?

A try-catch block is a programming construct used in exception handling. The try block contains the code that might throw an exception, while the catch block contains the code that handles the exception if one is thrown.

What is the syntax of a try-catch block?

The basic syntax of a try-catch block is as follows:

```
try {  
    // Code that might throw an exception  
}  
catch (ExceptionType e) {  
    // Code to handle the exception  
}
```

What is the purpose of the finally block in a try-catch-finally statement?

The finally block is used to contain code that is guaranteed to execute regardless of whether or not an exception is thrown. It is typically used for cleanup operations such as closing files or releasing resources.

What is the difference between a checked exception and an unchecked exception?

A checked exception is a type of exception that the compiler requires the program to handle or declare, while an unchecked exception is a type of exception that the compiler does not require the program to handle or declare.

How can you create your own exception class?

You can create your own exception class by extending the Exception class or one of its

subclasses. Your custom exception class should provide constructors that allow you to pass any necessary information to the superclass.

What is the purpose of the throw keyword?

The throw keyword is used to explicitly throw an exception from a method or block of code. It allows you to create and throw your own custom exceptions or to re-throw exceptions that have been caught by a catch block.

What is the purpose of the throws keyword?

The throws keyword is used in a method declaration to indicate that the method may throw one or more types of exceptions. It allows the calling code to handle the exceptions that might be thrown by the method.