Ques 1. Explain different types of Errors in java?

Ans:- Ther are three main types of errors in Java are syntax errors, runtime errors, and logical errors.

**Syntax Errors:-** Syntax errors occur when syntactical problems occur in a Java program due to incorrect use of Java syntax.

**Runtime Errors:-** Runtime errors occur when the program has successfully compiled without giving any errors and creating a ".class" file. However, the program does not execute properly. These errors are detected at runtime or at the time of execution of the program.

**Logical Error:** A logic error is when your program compiles and executes, but does the wrong thing or returns an incorrect result or no output when it should be returning an output.

Ques 2. What is an Exception in java?

Ans:- In Java, an exception is an event that disrupts the normal flow of the program.

It is an object which is thrown at runtime.

Ques 3. How can you handle exception in java ? Explain with an example?

Ans:- The "try" keyword is used to specify a block where we should place an exception code. It means we can't use try block alone. The try block must be followed by either catch or finally. The "catch" block is used to handle the exception.

Example

class ExceptionHandlingExample {

public static void main(String[] args) {

String numberStr = "123abc"; // This is not a valid integer string

try {

int number = Integer.parseInt(numberStr);

System.out.println("Parsed number: " + number);

} catch (NumberFormatException e) {

System.err.println("Invalid number format: " + numberStr);

}

}

}

Ques 4. Why we do need Exception handling in java?

Ans:- Exception handling allows for the program to anticipate and recover from errors, thus making the program more robust and resistant to unexpected conditions. By catching and handling exceptions, the program can continue to execute and provide a more stable user experience.

Ques 5. What is the different between exception and error in java?

Ans:- Errors occur at compile time and run time, which can terminate the compilation or execution. Exceptions occur only at run time, just that checked exceptions can be detected at compile time.

Errors are also unchecked like Runtime Exceptions.

Exceptions provide you the opportunity to make your program run in normal flow.

Ques 6. Name the different types of exception in java?

Ans:- There are two types of exceptions in Java:

Checked exceptions: These are the exceptions that are checked by the compiler at compile time.

Unchecked exceptions: These are the exceptions that are not checked by the compiler at compile time.

Ques 7. Can we just use try instance of finally and catch blocks?

Ans:- In Java, you can use try, catch, and finally blocks to handle exceptions. The instance of operator, however, is not typically used directly within these blocks for exception handling.