while statement in Java

While Statement in Java

while

do while

Java While Loop

The while loop loops through a block of code as long as a specified condition is true:

```
while (condition) {
  // code block to be executed
}
```

Java While Loop

```java
int i = 0;
while (i < 5) {
  System.out.println(i);
  i++;
}
```

Java While Loop

The **do while** loop is a variant of the while loop.

This loop will execute the code block once, before checking if the condition is true, then it will repeat the loop as long as the condition is true.

```
do {

  // code block to be executed

}

while (condition);
```

Java While Loop

```java
int i = 0;
do {
  System.out.println(i);
  i++;
}
while (i < 5);
```

Java Exceptions

Java try and catch

The **try** statement allows you to define a block of code to be tested for errors while it is being executed.

The **catch** statement allows you to define a block of code to be executed, if an error occurs in the try block.

The **try** and **catch** keywords come in pairs:

The **finally** statement lets you execute code, after try...catch, regardless of the result:

Java Exceptions

```java
public class Main {
  public static void main(String[] args) {
    try {
      String number = 1;
      System.out.println(number);
    } catch (Exception e) {
      System.out.println("Something went wrong.");
    } finally {
      System.out.println("The 'try catch' is finished.");
    }
  }
}
```

Problem

Develop a Java login application prompting the user to input a username and password. The program will authenticate this data against default credentials.

Continuously prompt the user until the correct username and password combination is entered, ensuring the application runs until successful authentication.