Exception in Java

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Content

1. Intro to Exception
2. Exception classes
3. Exception handling
4. User defined exception

Exception

➢ what is an exception ?

➢ Java exception is an object that describes an exceptional condition that has occurred in a piece of code.

Example - test1.java

Exception Handling

➤ what is an exception handling?

➤ try .. catch block

Example - test2.java

➤ try with multiple catch block

Example - mcatch.java

Exception Classes

✓ Exception is the super class of all exception classes

Types of exception classes

Checked exception (compile time)

-ClassNotFoundException

-FileNotFoundException (M.java)

-IllegalAccessException

-InstantiationException

-NoSuchMethodException

-IOException

Unchecked exception (Run time)

-ArithmeticException

-ArrayIndexOutOfBoundsException

-ArrayStoreException

-NegativeArraySizeException

-NullPointerException

Exception Handling

➤ try .. catch .. finally block

Example - exceptfina.java

➤ throw statement

Example - throwfina.java

➤ throws statement

Example - throwsdemo.java

User defined exception

➢ Create a subclass of Exception
➢ Create an object of the subclass and then throw it

Example - myexcept.java
             myexceptdemo.java

Question

Write a program to find the corresponding grade for the user entered mark. If the user entered mark is negative, then throw an user defined exception such as NegativeMarkException and give another chance to the user to enter the mark.

Advantage of Exception handling

- ➢ Program doesn't terminate in between

- ➢ User get an understandable message for the exception

Thank you