import java.io.\*;

class Super

{

void show() { System.out.println("parent class"); }

}

public class Sub extends Super

{

void show() throws IOException //Compile time error

{ System.out.println("parent class"); }

public static void main( String[] args )

{

Super s=new Sub();

s.show();

}

}

As the method show() doesn't throws any exception while in Super class, hence its overriden version can also not throw any checked exception.

Example of Subclass overriden Method declaring Unchecked Exception

import java.io.\*;

class Super

{

void show(){ System.out.println("parent class"); }

}

public class Sub extends Super

{

void show() throws ArrayIndexOutOfBoundsException //Correct

{ System.out.println("child class"); }

public static void main(String[] args)

{

Super s=new Sub();

s.show();

}

}

Output : child class

Because ArrayIndexOutOfBoundsException is an unchecked exception hence, overrided show() method can throw it.

More about Overriden Methods and Exceptions

If Super class method throws an exception, then Subclass overriden method can throw the same exception or no exception, but must not throw parent exception of the exception thrown by Super class method.

It means, if Super class method throws object of NullPointerException class, then Subclass method can either throw same exception, or can throw no exception, but it can never throw object of Exception class (parent of NullPointerException class).

Example of Subclass overriden method with same Exception

import java.io.\*;

class Super

{

void show() throws Exception

{ System.out.println("parent class"); }

}

public class Sub extends Super {

void show() throws Exception //Correct

{ System.out.println("child class"); }

public static void main(String[] args)

{

try {

Super s=new Sub();

s.show();

}

catch(Exception e){}

}

}

Output : child class

Example of Subclass overriden method with no Exception

import java.io.\*;

class Super

{

void show() throws Exception

{ System.out.println("parent class"); }

}

public class Sub extends Super {

void show() //Correct

{ System.out.println("child class"); }

public static void main(String[] args)

{

try {

Super s=new Sub();

s.show();

}

catch(Exception e){}

}

}

Output : child class

Example of Subclass overriden method with parent Exception

import java.io.\*;

class Super

{

void show() throws ArithmeticException

{ System.out.println("parent class"); }

}

public class Sub extends Super {

void show() throws Exception //Cmpile time Error

{ System.out.println("child class"); }

public static void main(String[] args)

{

try {

Super s=new Sub();

s.show();

}

catch(Exception e){}

}

}