

Course Name: A Level (2nd Sem)

Subject: JAVA

Topic : ExceptionHandling with MethodOverriding **Date: 20-04-20**

ExceptionHandling with MethodOverriding

There are some rules which are to be followed when there is case of method overriding:

Rule2: If the superclass method does not declare an exception, subclass overridden method can only declare unchecked exception.

```
class Parent {
    void show()
    {
        System.out.println("parent-exception");
    }
}
class Child extends Parent
{
    void show() throws ArithmeticException
    {
        System.out.println("child-exception");
    }
    public static void main(String args[]){
        Parent p=new Child();
        p.show();
    }
}
```

Rule3: If the superclass method declares an exception, subclass overridden method can declare same, subclass exception or no exception but it cannot declare the parent exception.

```
class Parent {
    void show() throws ArithmeticException
    {
        System.out.println("parent-exception");
    }
}
class Child extends Parent {
    void show()throws Exception
    {
        System.out.println("child");
    }
}
```

```

}
public static void main(String args[]){
Parent p=new Child();
p.show();
}
}

```

Explanation:we see that parent class has ArithmeticException which is sub-class Exception of parent Exception class.

Rule4: When same exception is thrown in sub class as well as in parent class,there will be no error.

```

class Parent{
void show()throws Exception
{
System.out.println("parent- exception");
}
}

```

```

class Child extends Parent{
void show() throws Exception
{
System.out.println("child- exception");
}
}

```

```

public static void main(String args[]){
Parent p=new Child();
p.show();

}
}

```

Same exception,so no error

Rule5: when subclass overridden method declares subclass exception, there is no error

```
class Parent {  
    void show() throws Exception  
    {  
        System.out.println("parent- exception");  
    }  
}
```

```
class Child extends Parent {  
    void show() throws ArithmeticException  
    {  
        System.out.println("child- exception");  
    }  
}
```

```
public static void main(String args[]) {  
    Parent p = new Child();  
    p.show();  
}
```

No error because Parent overridden method throws Exception and subclass method throws subclass exception.

Exercise:

1. Write the difference between throw and throws keyword in java with proper examples.
2. Write down the different scenarios when method overriding with exception occurs in java.