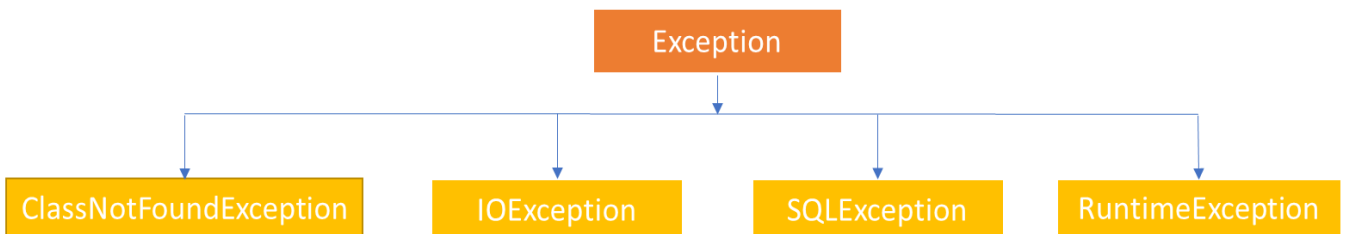


Java Concept 56

- In **Try Catch** block **Child** class exception **must be caught first**



Error

```
1 try
2 {...}
5 Catch(Exception e)
6 {...}
9 Catch(IOException)
10 {...}
```

As Parent Class Exception Caught First

No Error

```
1 try
2 {...}
5 Catch(IOException)
6 {...}
9 Catch(Exception e)
10 {...}
```

As Child Class Exception Caught First

```
1 //catching parent class exception first // Error
2 class Parent extends Exception {}
3 class Child extends Parent {}
4 public class JavaConcept
5 {
6     public static void main(String args[])
7     {
8         try {
9             System.out.println(C.P+"Inside "
10                + "try block"+C.RE);
11             throw new Parent();
12         }
13
14         catch(Parent b) {
15             System.out.println(C.G+"Exception"
16                + " caught in Parent class"+C.RE);
17         }
18         catch(Child d) {
19             System.out.println(C.R+"Caught"
20                + " derived class exception"+C.RE);
21         }
22     }
23 }
```

Error - exception javaconcept.Child has already been caught
at javaconcept.JavaConcept.main

```

1 //catching child class exception first // No Error
2 class Parent extends Exception {}
3 class Child extends Parent {}
4 public class JavaConcept
5 {
6     public static void main(String args[])
7     {
8         try {
9             System.out.println(C.P+"Inside"
10                + " try block"+C.RE);
11             throw new Parent();
12         }
13         catch(Child d) {
14             System.out.println(C.R+"Exception"
15                + " caught in Child class"+C.RE);
16         }
17         catch(Parent b) {
18             System.out.println(C.G+"Exception"
19                + " caught in Parent class"+C.RE);
20         }
21     }
22 }

```

run:

Inside try block

Exception caught in Parent class

```

1 //catching parent class exception first // Error
2 // Child Class : ArrayIndexOutOfBoundsException
3 // Parent Class : Exception
4 public class JavaConcept
5 {
6     public static void main(String args[])
7     {
8         try {
9             char arr[] = {'a','b','c','d'};
10             for(int i=0;i<10;i++)
11             {
12                 System.out.println("index : "
13                    + i + " value : "+ arr[i]);
14             }
15         }
16         catch(Exception b) {
17             System.out.println(C.G+"Parent : "
18                + " Exception"+C.RE);
19         }
20         catch(ArrayIndexOutOfBoundsException d){
21             System.out.println(C.R+"Child : "
22                + "ArrayIndexOutOfBoundsException"
23                +C.RE);
24         }
25     }
26 }
27 }

```

Error - exception java.lang.ArrayIndexOutOfBoundsException has already been caught at javaconcept.JavaConcept.main

```

1 //catching child class exception first // No Error
2 // Child Class : ArrayIndexOutOfBoundsException
3 // Parent Class : Exception
4 public class JavaConcept
5 {
6     public static void main(String args[])
7     {
8         try {
9             char arr[] = {'a','b','c','d'};
10            for(int i=0;i<10;i++)
11            {
12                System.out.println("index : "
13                    + i + " value : "+ arr[i]);
14            }
15        }
16        catch(ArrayIndexOutOfBoundsException d){
17            System.out.println(C.R+"Child : "
18                + "ArrayIndexOutOfBoundsException"
19                +C.RE);
20        }
21        catch(Exception b) {
22            System.out.println(C.G+"Parent : "
23                + "Exception"+C.RE);
24        }
25    }
26 }

```

run:

index : 0 value : a

index : 1 value : b

index : 2 value : c

index : 3 value : d

Child : ArrayIndexOutOfBoundsException