FACULTY OF Engineering & Technology

Advantage of exception handling

Exception handling ensures that the flow of the program doesn't break when an exception occurs.

Try block

1. The try block contains set of statements where an exception may be occur.
2. A try block is always followed by a catch block, which handles the exception that occurs in associated try block.
3. A try block must be followed by catch blocks or finally block or both.

Syntax of try block

```
try
{
  //statements that may cause an exception
}
```

Catch block

1. A catch block is where you handle the exceptions, this block must follow the try block.
2. A single try block can have several catch blocks associated with it.

Syntax of try catch in java

```
try
{
  //statements that may cause an exception
}
catch (Throwable type e)
{
   //error handling code
}
```

If an exception occurs in try block then the control of execution is passed to the corresponding catch block.

Multiple catch blocks

1. a single try block can have any number of catch blocks.
2.
```
catch(Exception e)
     {
    //This catch block catches all the exceptions
     }
```

```
class test
{
   public static void main(String args[])
   {
     try
        { int a[]=new int[6];
          a[2]=5/0;
          System.out.println("First print statement in try block");
        }
     catch(ArithmeticException e)
        {
        System.out.println(“ ArithmeticException");
         }
      catch(ArrayIndexOutOfBoundsException e)
       {
        System.out.println(": ArrayIndexOutOfBoundsException");
       }
      catch(Exception e)
       {
        System.out.println(“ Some Other exception");
       }
    System.out.println("Out of try-catch block...");
 }
}
```

Output:

ArithmeticException Out of try-catch block...