What is exception? Give example.

Exception handling: An exception is a condition that caused by runtime error in the program when the java interpreter encounter an error such as dividing an integer

 by zero in creates exception object and throws it. If the exception object not works properly the interpreter will display an error message.

Exception handling consist of following steps

1) Find the problem (Hit the exception).

2) Inform that an error has occur (Throw the exception).

3) Catch the exception (Receive the error information).

4) Take the corrective action.

Java has 5 keywords for exception handling:

1.try

2.catch

3.finally

4.throw

5.Throws

Example of exception handling in java:


```java
import java.util.*;
class Error3
{
public static void main(String args[])
 {
```

```java
float a,b,c;

Scanner s=new Scanner(System.in);

System.out.println("Enter the result");

 a=s.nextInt();

 b=s.nextInt();

try

 {

 c=a/b;

System.out.println("Division is "+c);

 }

catch(ArithmeticException e)

{

System.out.println("Divide by zero");

 }

 }

 }
```

What are difference between error and exception?

1)Basic=An error is caused due to lack of system resources.

An exception is caused because of the code.

2)Recovery=An error is irrecoverable.

An exception is recoverable.

3)Keywords=There is no means to handle an error by the program code.

Exceptions are handled using three keywords "try", "catch", and "throw".

4)Consequences=As the error is detected the program will terminated abnormally.

As an exception is detected, it is thrown and caught by the "throw" and "catch" keywords correspondingly

6)Types=Errors are classified as unchecked type.

Exceptions are classified as checked or unchecked type