

Dt : 9/9/2023

faq:

wt is the diff b/w

(i)throw

(ii)throws

(i)throw:

=>"throw" keyword is used to throw the object reference onto catch block.

(ii)throws:

=>"throws" keyword will raise the exception at method call.

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***imp**

(b)User defined Checked Exceptions:

=>The Checked Exceptions which are defined and raised by the programmer are known as User defined Checked Exceptions

=>we use the following steps to define and raise User defined Checked Exceptions:

step-1 : user defined method signature added with "throws" keyword.

step-2 : declare "throw" keyword in catch-block and perform re-throwing process.

Ex:

ProjectName : App_Exception3

packages,

p1 : Comparision.java

```
package p1;
public class Comparision extends Exception
{
    public Comparision(String msg)
    {
        super(msg);
    }
    public int getGreatest(int x,int y) throws
Comparision
    {
        try
        {
            if(x<0 || y<0)//Exception Condition
            {
                Comparision cp = new Comparision
                    ("Negative values : -1");
                throw cp;
            }
            if(x==0 || y==0)//Exception Condition
            {
                Comparision cp = new Comparision
                    ("Zero values : -2");
                throw cp;
            }
            if(x>y) return x;
            else return y;
        }//end of try
    }
}
```

```

        catch (Comparision cp)
        {
            throw cp;
        }
    }
}

```

p2 : DemoException3.java

package p2;

import java.util.*;

import p1.*;

public class DemoException3

{

public static void main(String[] args)

{

Scanner s = new Scanner(System.in);

try

{

System.out.println("Enter the value-1:");

int v1 = s.nextInt();

System.out.println("Enter the value-2:");

int v2 = s.nextInt();

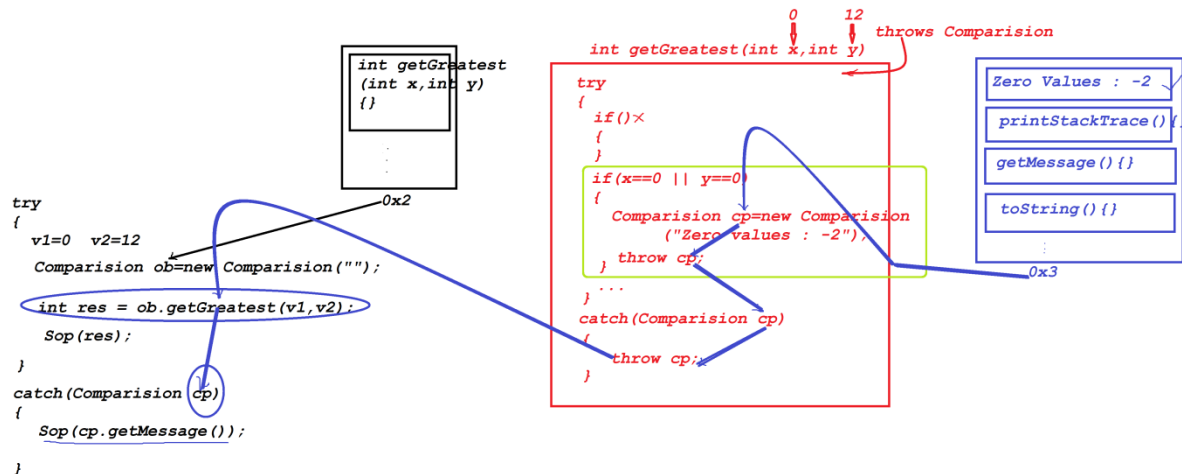
Comparision ob = new Comparision(""); //Con_call

int res = ob.getGreatest(v1, v2);

System.out.println("Result:"+res);

```
}  
  
catch(InputMismatchException ime)  
{  
    System.out.println("Enter only Integer values..");  
}  
  
catch(Comparision cp)  
{  
    System.out.println(cp.getMessage());  
}  
  
finally  
{  
    s.close();  
}  
  
}  
}
```

Diagram:



faq:

define re-throwing process?

=>The process of declaring "throw" keyword in catch block and performing throwing process is known as re-throwing process.

=>In re-throwing process the exception is handled by the catch-block of try-block where method-call is available.

faq:

define Exception propagation?

=>In Exception re-throwing process the exception is moved from one method to another method is known as Exception propagation.