Exceptions

scan.nextInt(); → 25AB ↵

→ InputMismatchException

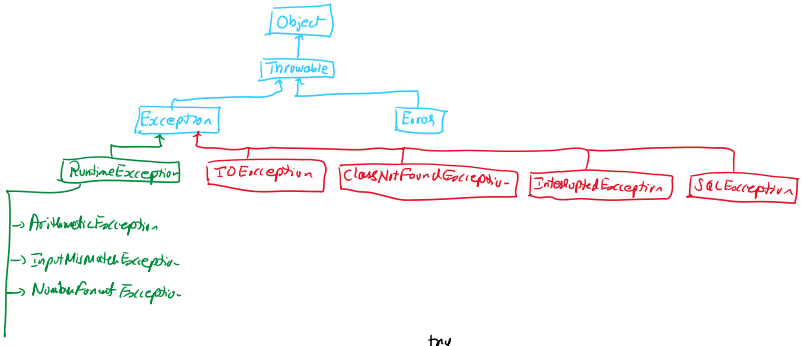
int Integer.parseInt(String) "25AB"

a=scan.nextInt(); → 5
b=scan.nextInt(); → 0
c=a/b

→ NumberFormatException

→ ArithmeticException

class InputMismatchException
{
}
class NumberFormatException
{
}
class ArithmeticException
{
}




```
try
{
    a=scan.nextInt();
    b=scan.nextInt();
    c=a/b;                    ——— AE
}
catch(InputMismatchException e)
{
    s.o.p("Invalid input");
    a=b=c=0;
}
catch(ArithmeticException e)
{
    s.o.p("Error:" + e)
    c=0;
}
catch(Exception e)
{
}
finally
{
}
```

try..catch

```
try
{
    ≡≡≡
}catch(Exception1 e)
{
    ≡
}
```

```
1  class Demo
2  {
3      public static void main(String[] args)
4      {
5          subfun1();
6      }
7      public static void subfun1()
8      {
9          subfun2();
10     }
11     public static void subfun2()
12     {   Scanner scan = new Scanner(System.in);
13
14         a=scan.nextInt();
15         b=scan.nextInt();
16         c=a/b;
17         s.o.p("Result:"+c);
18     }
19 }
```

Demo.java

JVM

Demo.java subfun2 :16 : ArithmeticException : / by zero
subfun1 : 9
main : 5

Stack Trace

throw

throw obj

a) IllegalArgumentException e = new IllegalArgumentException();
throw e;

b) throw new IllegalArgumentException();

```
try
{
    if(num > 7)
        throw new IllegalArgumentException();
    if(num == 0)
        throw new ArithmeticException();
}catch(IllegalArgumentException e)
{
    S.O.P(e);
}
catch(IllegalArgumentException e)
{
    S.O.P(
}
```

```
class EvenException extends RuntimeException
{
    EvenException()
    {
    }
    EvenException(String msg)
    {
        super(msg);
    }
class OddException extend Exception
{


}
class Main
{
    P S V main(String args)
    {
        Scanner scan = new Scanner(System.in);

        try
        {
            int num = scan.nextInt();
            if( num % 2 == 0)
                throw new EvenException();
            else
                throw new OddException();
        }catch(EvenException e)
        {
            S.O.P("Even no");
        }
        catch(OddException e)
        {
            S.O.P("Odd no");
        }
    }
}
```

```
class Main
{
public stat
{
    if(nu
    {
    else
}
P S V m
{
    Scann
    try
    {
        in
        ch
    }catch
    {
    }
    catch
    {
    }
}
```

```
void checkEvenOdd(int num) throws OddException
um%2==0)
throw new EvenException("Even no");
throw new OddException("Odd no");
ain()
a scan = new Scanner(System.in);
t num=scan.nextInt();
eckEvenOdd(num);
(EvenException e)
S.O.P("Even no.");
(OddException e)
S.O.P("Odd no");
```

S.O.P(e.getMessage());

02

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03

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04

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05

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