# Rapport de TP Exceptions

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## Exercice 1:

```java
package Exercice1;

public class EntNat {

    private int nbr;

    public EntNat(int nbr) throws ErrConst{
        if ( nbr < 0 ) throw new ErrConst("Ce nombre n'est pas un
entier naturel!!");
        this.nbr=nbr;
    }
    public int getN() {
        return nbr;
    }
}
```

```java
package Exercice1;

public class ErrConst extends Exception {
    public ErrConst(String message) {
        super(message);
    }
}
```

```java
package Exercice1;

public class Test {
    public static void main(String[] args) {
        try {
            EntNat nbr1 = new EntNat(4);
            System.out.println("Nombre 1 : " + nbr1.getN());
            EntNat nbr2 = new EntNat(-15);
```

```
            System.out.println("Nombre 2 : " + nbr2.getN());

        } catch (ErrConst e) {
            System.out.println(e.getMessage());
        }
    }
}
```

Excercice 2 :

```
package Exercice2;

public class EntNat{

    public static int somme(int nb1,int nb2) throws ErrSom {
        if (nb1 + nb2 < 0) throw new ErrSom("L'Addition est superieure
a MAX_VALUE");
        return nb1 + nb2;
    }

    public static int difference(int nb1,int nb2) throws ErrDiff {
        if (nb1 - nb2 < 0) throw new ErrDiff("La difference est
superieure a MAX_VALUE");
        return nb1 - nb2;
    }

    public static int produit(int nb1,int nb2) throws ErrProd {
        if (nb1 * nb2 < 0) throw new ErrProd("Le produit est superieure
a MAX_VALUE");
        return nb1 * nb2;
    }
}
```

```
package Exercice2;

public class ErrConst extends Exception{

    private int nbr;
```

```
    public ErrConst(int nbr) {
        this.nbr = nbr;
    }

    public int getNb() {
        return nbr;
    }
}
```

```
package Exercice2;

public class ErrDiff extends Exception{

    public ErrDiff(String message) {
        super(message);
    }
}
```

```
package Exercice2;

public class ErrProd extends Exception{

    public ErrProd(String message) {
        super(message);
    }
}
```

```
package Exercice2;

public class ErrSom extends Exception{

    public ErrSom(String message) {
        super(message);
    }
}
```

```
package Exercice2;

public class Test {
```

```
    public static void main(String[] args) {

        try{
            System.out.println("La Somme est : " + EntNat.somme(42 ,
14));
            System.out.println(EntNat.somme(Integer.MAX_VALUE , 200));

        }catch(ErrSom e){

            System.out.println(e.getMessage());

            try{

                System.out.println("La difference est : " +
EntNat.difference(45 , 13));
                System.out.println(EntNat.diff(Integer.MAX_VALUE + 9,
3));

            }catch(ErrDiff ee) {

                System.out.println(ee.getMessage());

                try {

                    System.out.println("Le produit est : " +
EntNat.produit(63 , 12));
                    System.out.println(EntNat.prod(Integer.MAX_VALUE
+2, 12));
                } catch (ErrProd eee) {

                    System.out.println(eee.getMessage());

                }
            }
        }
    }
}
```