Rapport TP Exception

Exercice 1:

```java
package EX1;

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

```java
package EX1;

public class EntNat {
    private int n;

    public EntNat(int n) throws ErrConst{
        if(n < 0)  throw new ErrConst("Ce nombre ne peut pas être négatif.");
        this.n = n;
    }

    public int getN() {
        return n;
    }
}
```

```java
package EX1;

public class TestEntNat {
    public static void main(String[] args) {
        try {
            EntNat entNat1 = new EntNat(11);
            System.out.println("entNat1 : " + entNat1.getN());
            EntNat entNat2 = new EntNat(-9);
            System.out.println("entNat2 : " + entNat2.getN());

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

Exercice 2:

```java
package EX2;

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

```java
package EX2;

public class EntNat {
    public static int  somme(int a,int b) throws ErrSom {
        if(a + b < 0) throw new ErrSom("Somme superieure a MAX_VALUE");
        return a + b;
    }

    public static int difference(int a,int b) throws ErrDiff {
        if(a - b < 0) throw new ErrDiff("Différence superieure a MAX_VALUE");
        return a - b;
    }

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

```java
package EX2;

public class ErrSom extends Exception{

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

```java
package EX2;

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

```java
package EX2;

public class TestEntNat {
    public static void main(String[] args) {
        try {
            System.out.println("la somme :" + EntNat.somme(10, 9));
            System.out.println(EntNat.somme(Integer.MAX_VALUE , 12));

        } catch (ErrSom e) {
            System.out.println(e.getMessage());
            try {
                System.out.println("Difference :" + EntNat.difference(9, 3));
                System.out.println(EntNat.difference(Integer.MAX_VALUE +4, 1));

            } catch (ErrDiff e1) {
                System.out.println(e1.getMessage());
                try {
                    System.out.println("produit :" + EntNat.produit(5, 1));
                    System.out.println(EntNat.produit(Integer.MAX_VALUE +3, 19));
                } catch (ErrProd e2) {
                    System.out.println(e2.getMessage());
                }
            }
        }
    }
}
```