

Solution du TP BigDecimal

CalculDollars.java

```
package fr.afpa.math;
import java.io.BufferedReader;
import java.io.IOException;
import java.io.InputStreamReader;
import java.math.BigDecimal;
import java.math.RoundingMode;
import java.util.Scanner;
public class CalculDollars{
    public static BigDecimal VAL_1EURO = new BigDecimal("1.1882");

    public static BigDecimal euroToDollar(BigDecimal euros) {
        BigDecimal resultat = euros.multiply(VAL_1EURO);
        return resultat.setScale(2, RoundingMode.HALF_UP);
    }
    public static BigDecimal dollarToEuro(BigDecimal dollars) {
        return dollars.divide(VAL_1EURO, 2, RoundingMode.HALF_UP);
    }
    public static void main( String [] args) throws IOException{
        Scanner sc = new Scanner(System.in);
        BigDecimal bg = null;
        BigDecimal resultat = null;
        String entreeClavier = null;

        System.out.print("\nEntrez la somme en euros : ");
        entreeClavier = sc.nextLine();

        // NOK val = Double.parseDouble( entreeClavier );
        bg = new BigDecimal( entreeClavier );

        resultat = euroToDollar( bg );
        System.out.println( "montant equivalent en dollars: "
            + resultat );
        System.out.println( "\nAppel de DollarToEuro dans la foulée: "
            + dollarToEuro( resultat ));

        System.out.print("Entrez la somme en dollars : ");
        entreeClavier = sc.nextLine();

        //NOK double val = Double.parseDouble( entreeClavier );
        bg = new BigDecimal( entreeClavier );

        resultat = dollarToEuro( bg );
        System.out.println( "montant equivalent en Euros: "
```

```
CalculDollars.java
+ resultat );
```

```
System.out.println( "\nAppel de euroToDollar dans la foulée: "
+ euroToDollar(resultat));
```

```
sc.close();
```

```
}
```

```
////////////////////////////////////
```

```
// AFICHAGE CONSOLE
```

```
//Entrez la somme en euros : 100
```

```
//montant equivalent en dollars: 118.82
```

```
//
```

```
//Appel de DollarToEuro dans la foulée: 100.00
```

```
//Entrez la somme en dollars : 100
```

```
//montant equivalent en Euros: 84.16
```

```
//
```

```
.....//Appel de euroToDollar dans la foulée: 100.00 .....
```

```
}
```