

TD03 Correction

Matière : PROGRAMMATION OBJET

Classes : SEM2

```
package meteo;
public class MeteoVille {
    // Constantes
    public static final String UNITE_TEMP = "°C";
    public static final String UNITE_VITESSE = "Km/h";
    public static final String UNITE_QUANTITE = "mm";
    public static final String UNITE_HEURE = "h";
    public static final String UNITE_MINUTE = "m";
    // Attributs
    private String ville;
    private String date;
    private int temp;
    private int vVent;
    private int qPluie;
    private int hL;
    private int mL;
    private int hC;
    private int mC;
    // Constructeurs
    public MeteoVille(String ville, String date) {
        this.ville = ville;
        this.date = date;
        temp = 0;
        vVent = 0;
        qPluie = 0;
        hL = 0;
        mL = 0;
        hC = 0;
        mC = 0;
    }
    // Setters et Getters
    public void setTemp(int temp) {
        this.temp = temp;
    }
    public void setvVent(int vVent) {
        this.vVent = vVent;
    }
    public void setqPluie(int qPluie) {
        this.qPluie = qPluie;
    }

    public void sethL(int hL) {
        this.hL = hL;
    }
    public void setmL(int mL) {
        this.mL = mL;
    }
}
```

```

public void sethC(int hC) {
    this.hC = hC;
}

public void setmC(int mC) {
    this.mC = mC;
}

public int getTemp() {
    return temp;
}

// Méthodes
public void afficher() {
    System.out.println("Ville: " + ville);
    System.out.println("Date: " + date);
    System.out.println("Température: " + temp + UNITE_TEMP);
    System.out.println("Vitesse vent: " + vVent + UNITE_VITESSE);
    System.out.println("Quantité pluie: " + qPluie + UNITE_QUANTITE);
    System.out.println("Lever Soleil: " + hL + UNITE_HEURE + ":" + mL +
UNITE_MINUTE);
    System.out.println("Coucher Soleil: " + hC + UNITE_HEURE + ":" + mC +
UNITE_MINUTE);
}

public void afficherEtatMer() {
    System.out.print("Etat mer: ");
    if (vVent > 0 && vVent < 15)
        System.out.println("Calme");
    else if (vVent < 30)
        System.out.println("Agitée");
    else
        System.out.println("Très Agitée");
}

public String getLongueurJournee() {
    String res = "";
    int lm = (hC * 60 + mC) - (hL * 60 + mL);
    int nbHeure = lm / 60;
    int nbMinute = lm % 60;
    res = nbHeure + " " + UNITE_HEURE + " " + nbMinute + " " + UNITE_MINUTE;
    return res;
}
}

package meteo;

public class TestMeteoVille {
    public static void main(String[] args) {
        MeteoVille mv = new MeteoVille("Sfax", "18-11-2014");
        mv.setTemp(29);
        mv.setvVent(20);
        mv.setqPluie(25);
        mv.sethL(5);
        mv.setmL(10);
        mv.sethC(17);
        mv.setmL(10);
        System.out.println("Température: " + mv.getTemp());
        mv.afficher();
        mv.afficherEtatMer();
        System.out.println("La longueur de la journéeest : " +
            mv.getLongueurJournee());
    }
}

```

