UTILISATION DES ENUM EN JAVA … MAIS EN MODIFIANT LE CODE

LINK TO THE PATH

```
enum Direction { North, East, South, West }

public class Main {
    public static final String label(Direction d) {
        switch (d) {
            case North : return "north";
            case East : return "east";
            case South : return "south";
            //case West : return "west";
        }
        throw new IllegalArgumentException("not a valid direction");
    }

    public static void main(String args[]) {
     System.out.println(label(Direction.East));
     System.out.println(label(Direction.West));
    }
}
```

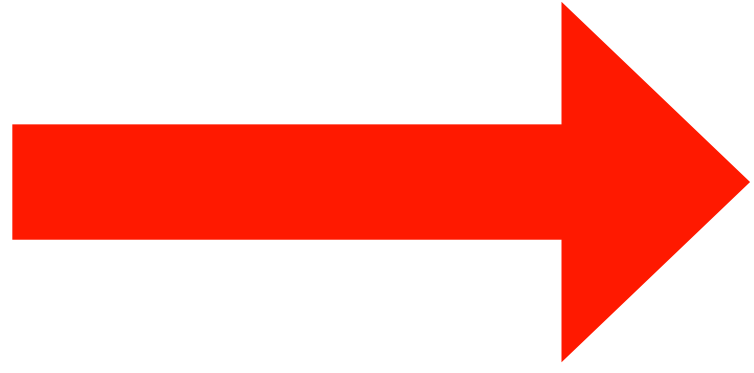
```
Exception in thread "main" java.lang.IllegalArgumentException: not a valid direction
```

Runtime ERROR

Le compilateur ne sait pas détecter si nous avons traité tous les cas !!!

MIAGE M2 - QUALITÉ DU SI - THOMAS HAESSLÉ

Indice sur le problème



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LINK TO THE PATH

ON EST EN OOP : ON A DU POLYMORPHISME PAR HÉRITAGE

```
interface Direction{
    public int toInt();
    public String toString();
};
class North implements Direction{
     public int toInt(){ return 1;};
     public String toString(){ return "north";};
};
class East implements Direction{
     public int toInt(){ return 2;};
     public String toString(){ return "east";};
};
class South implements Direction{
     public int toInt(){ return 3;};
     public String toString(){ return "south";};
};
class West implements Direction{
     public int toInt(){ return 4;};
     public String toString(){ return "west";};
};

public class Main {
    public static final String label(Direction d) {
        return d.toString();
    }

    public static void main(String args[]) {
     System.out.println(label(new East()));
     System.out.println(label(new West()));
    }
}
```