







UTILISANT EN MANIÈRE NON CONFORME

**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**





RuntimError

**Le campilateur ne sait pas décompiler si nous avons traité tous les cas!!!**

MAGNET 2-DUALS - THOUGHTS

Indice sur le problème



# LINK TO THE PATH

## UTILISATION DES ENUM EN JAVA ... MAIS EN MODIFIANT LE CODE



Indice sur le problème



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enum Direction { North, East, South, West }

public class Main {
    public static final String label(Direction d) {
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    public static void main(String args[]) {
        System.out.println(label(Direction.East));
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```

Runtime ERROR

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

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

# LINK TO THE PATH

IMPLÉMENTONS NOTRE ENUM EN JAVA ... IL PARAÎT QUE JAVA 14 A DU PATTERN MATCHING



```
interface Direction{};
class North implements Direction{};
class East implements Direction{};
class South implements Direction{};
class West implements Direction{};

public class Main {
    public static final String label(Direction d) {
        if(d instanceof North dn){
            return "north";
        }else if(d instanceof East de){
            return "east";
        }else if(d instanceof South ds){
            return "south";
        }else if(d instanceof West dw){
            return « west";
        }
    }

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