

# Classes Threads

- Dois modos de se criar threads em Java
  - Herdando da classe Thread
  - Implementando a interface Runnable

# Herdando da Classe Thread

```
class Carro extends Thread {
    public Carro(String nome) {        super(nome); }
    public void run() {
        for (int i=0; i<10;i++) {
            try {
                sleep((int)(Math.random()*1000));
            }
            catch (Exception e) {};
            System.out.print(getName());
            for (int j=0; j<i; j++)
                System.out.print("--");
            System.out.println(">");
        }
        System.out.println(getName() + " completou a prova.");
    }
}
```

# Herdando da Classe Thread

```
public class Corrida {
    public static void main(String args[]) {
        Carro carroA = new Carro("Barrichelo");
        Carro carroB = new Carro("Schumacher");
        carroA.start();
        carroB.start();
        try {
            carroA.join();
        } catch (Exception e) {}
        try {
            carroB.join();
        } catch (Exception e) {}
    }
}
```

# Possível Resultado

```
Barrichelo>
Schumacher>
Schumacher-->
Barrichelo-->
Schumacher---->
Barrichelo---->
Schumacher----->
Barrichelo----->
Barrichelo----->
Schumacher----->
Barrichelo----->
Schumacher----->
Barrichelo----->
Schumacher----->
Barrichelo----->
Schumacher----->
Barrichelo----->
Barrichelo----->
Barrichelo completou a prova.
Schumacher----->
Schumacher----->
Schumacher completou a prova.
```

# Implementando Runnable

```
class Carro2 implements Runnable {
    private String nome;
    public Carro2(String nome) {this.nome = nome;}
    public void run() {
        for (int i=0; i<10;i++) {
            try {
                Thread.sleep((int)(Math.random()*1000));
            }
            catch (Exception e) {};
            System.out.print(nome);
            for (int j=0; j<i; j++)
                System.out.print("--");
            System.out.println(">");
        }
        System.out.println(nome + " completou a prova.");
    }
}
```

# Implementando Runnable

```
public class Corrida2 {
    public static void main(String args[]) {
        Carro2 carroA = new Carro2("Barrichelo");
        Carro2 carroB = new Carro2("Schumacher");
        Thread threadA = new Thread(carroA);
        Thread threadB = new Thread(carroB);
        threadA.start();
        threadB.start();
        try {
            threadA.join();
        } catch (Exception e) {}
        try {
            threadB.join();
        } catch (Exception e) {}
    }
}
```