

Introdução a Programação - IF669
<http://www.cin.ufpe.br/~if669>

Arrays multidimensionais

AULA 06.2

Ricardo Massa F. Lima
rmfl@cin.ufpe.br

Sérgio C. B. Soares
scbs@cin.ufpe.br

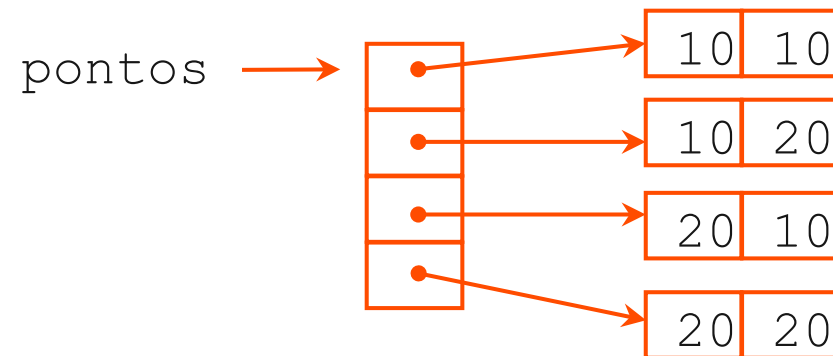


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Arrays multidimensionais

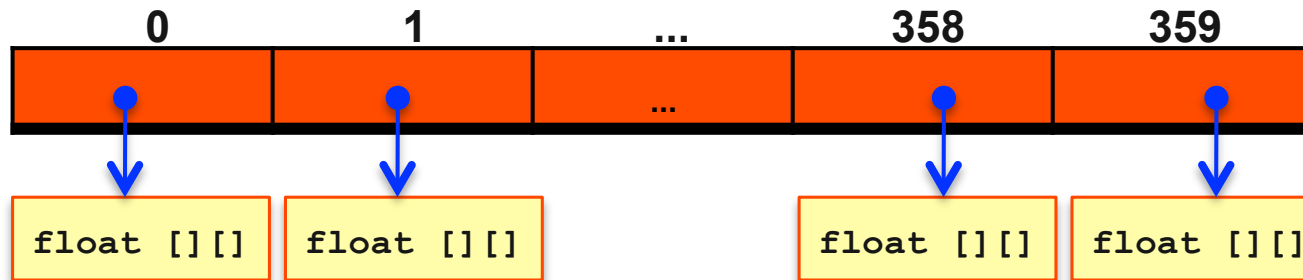
```
int[][] pontos = {{10,10},  
                  {10,20},  
                  {20,10},  
                  {20,20}};
```



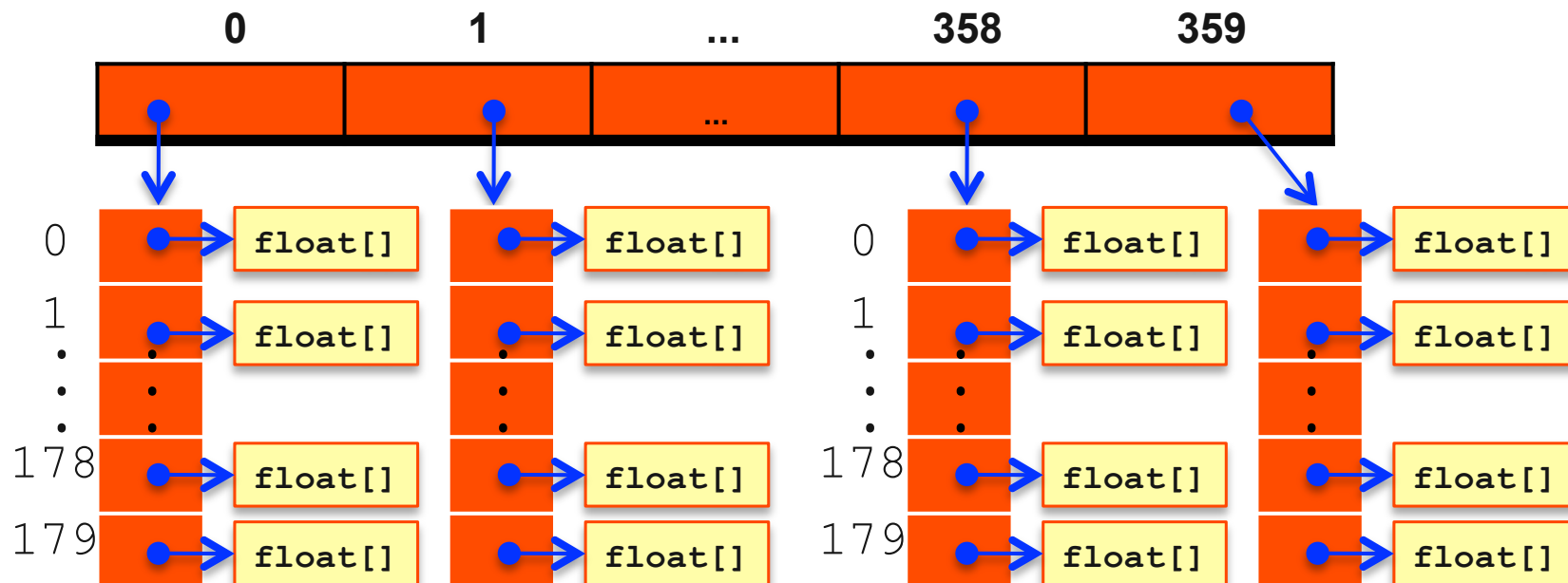
```
int[][] pontos = new int[4][2];  
for(int i=0; i<4; i++)  
    for(int j=0; j<2; j++)  
        pontos[i][j] = in.nextInt();
```

Arrays multidimensionais

```
float[][][] globalTemperatureData = new float[360][][];
```

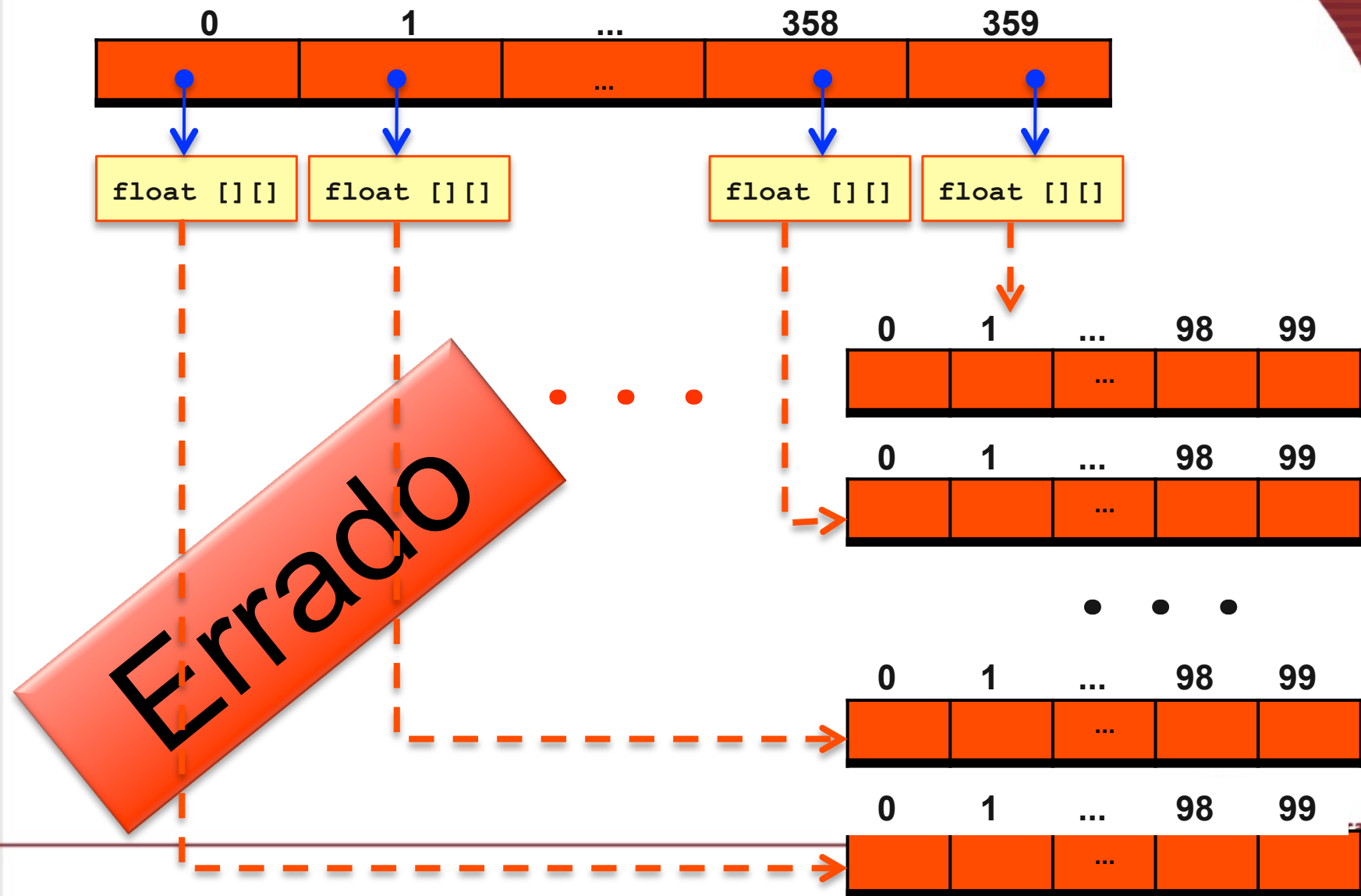


```
float[][][] globalTemperatureData = new float[360][180][];
```



Arrays multidimensionais

```
float[][][] globalTemperatureData = new float[360][][100]
```

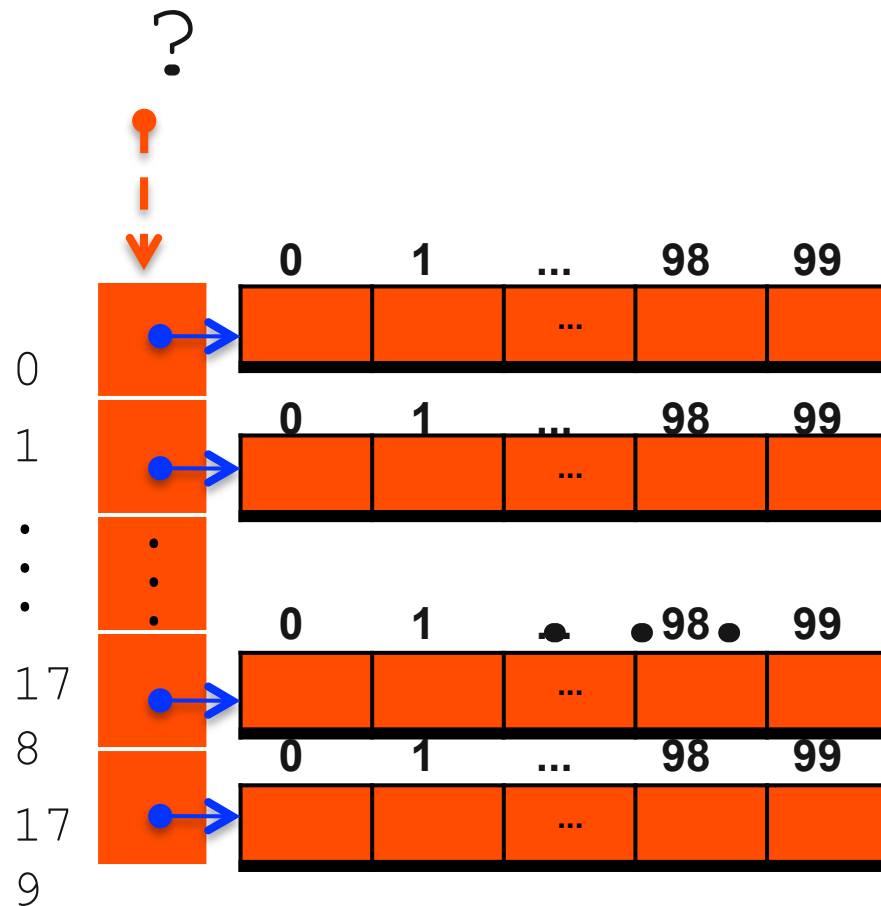


Arrays multidimensionais



```
float[][][] globalTemperatureData = new float[][180][100]
```

Errado



Arrays multidimensionais

inicialização array 5x5

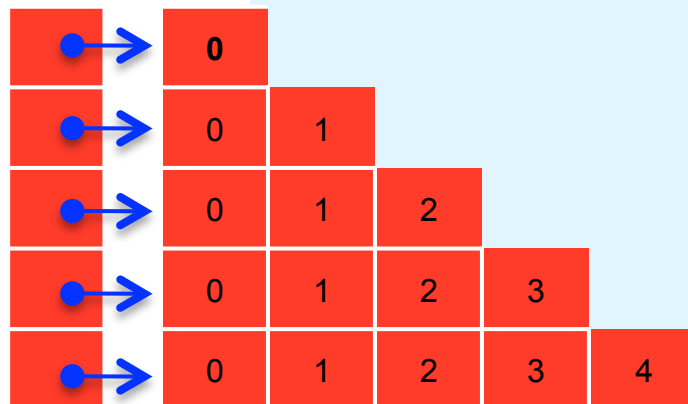
```
int[][] products = { {0, 0, 0, 0, 0},  
                      {0, 1, 2, 3, 4},  
                      {0, 2, 4, 6, 8},  
                      {0, 3, 6, 9, 12},  
                      {0, 4, 8, 12, 16} };
```

array anônimo

```
Teste t = new Teste();  
t.m( new int[][] {{1,2}, {3,4}} );
```

Arrays multidimensionais não retangulares

- Em Java, arrays multidimensionais são considerados arrays de arrays
- Diferente de outras linguagens, que consideram arrays como arrays de blocos idênticos



```
int[][] products = { {0},  
                      {0, 1},  
                      {0, 1, 2},  
                      {0, 1, 2, 3},  
                      {0, 1, 2, 3, 4} };
```