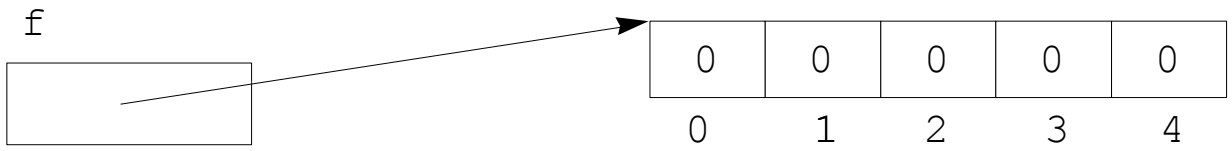
Arrayer

```
double[] f;  // f får värdet null
f = new double[5];
```



eller kortare:

```
double[] f = new double[5];
```

Indexering:

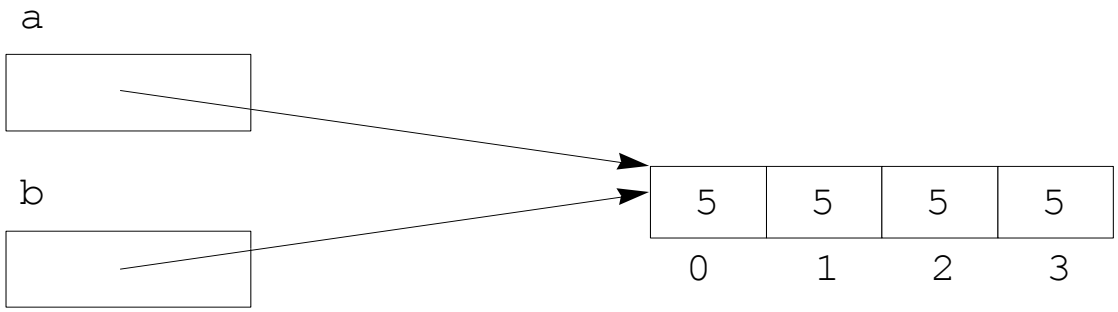
```
f[4] = 2.75;
f[i+j] = 2.75;
```

Initiering, alternativ:

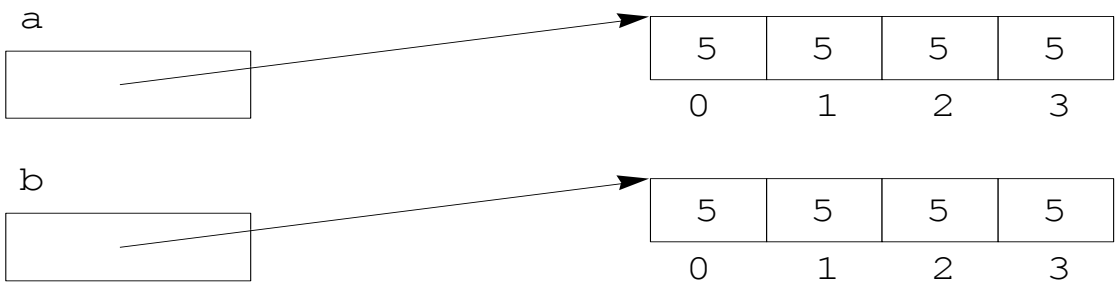
```
int[] a = new int[6];
int[] b = {13, 23, 55, 4};
int[] b = {i, i-1, i+j, 18};
b = {5, 5, 5, 5};  // otillåtet!
b = new int[]{5, 5, 5, 5};
```

Kopiering:

```
a = b;   // kopierar referensen
```




```
a = (int[]) b.clone();  // kopierar arrayen
```




```
int[] c = {10, 20, 30, 40, 50, 60};
System.arraycopy(c,2,b,1,3);  // 3 st från c[2] till b[1]
```

Jämförelser

```
if (a == b)                    // Tillåtet, men inte vad man menar
   ...
if (Arrays.equals(f,g))     // Kan användas istället
   ...
```

Genomlöpning

```
for (int i=0; i<a.length; i++)
  System.out.println(a[i]);
```

```
double[] w = new double[100];
for (int i=0; i<w.length; i++)
   w[i] = Math.sqrt(i);
```

*förenklad **for**-sats (for each)*

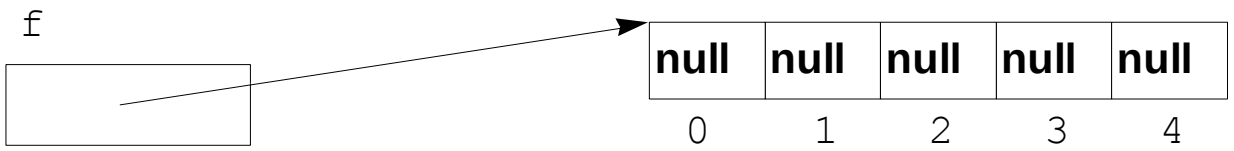
```
for (double d : w)
  System.out.println(d);
```

samma som

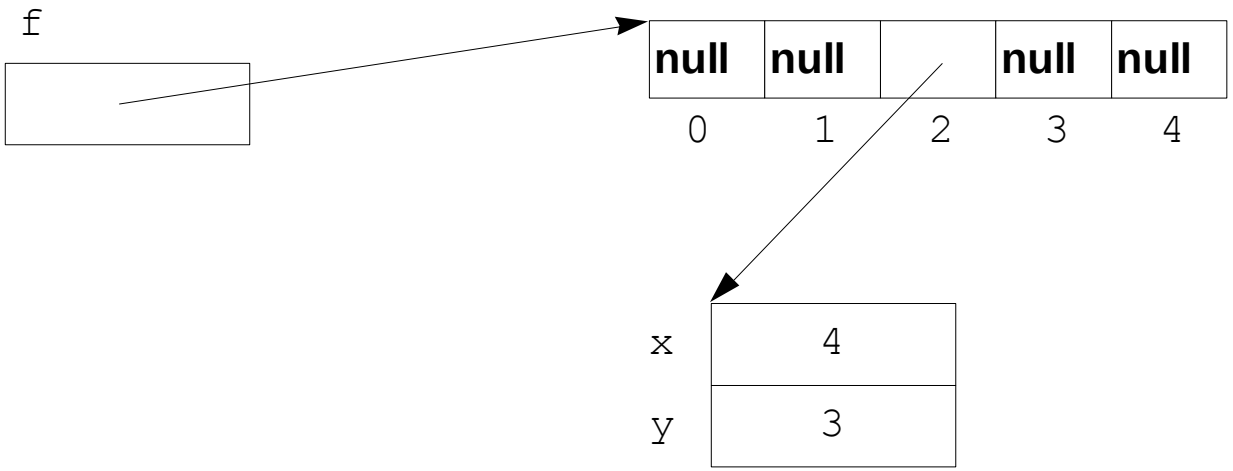
```
for (int i=0; i<w.length; i++) {
  double d = w[i];
  System.out.println(d);
}
```

Arrayer med referenser

```
Point[] f = new Point[5];
```




```
f[2] = new Point(4,3);
```




```
System.out.println("(" + f[2].x + ", " + f[2].y + ")");
```

Tre steg:

- Deklarera referensvariabel
- Skapa array
- Skapa de enskilda objekten

Alternativ initiering

```
Point[] g = {new Point(1,1),  new Point(0,1),
             new Point(-1,1), new Point(0,0)};
```

```
String[] meddelande = {"Stäng kranen",
                       "Öppna fönstret",
                       "Stäng av datorn",
                       "Starta fläkten"};
```