1.多维数组:

```java
//多维数组：把数组当成元素放到另一个数组中
int[] a1 = {1, 2, 3};
int[] b1 = {4, 5, 6};

//二维数组
int[][] c1 = {a1, b1};
int c2[][] = {{1, 2, 3}, {4, 5, 6}};
System.out.println(c1.length);

//遍历二位数组
    for (int i = 0; i <c1.length; i++) {
        for (int j = 0; j<c1[i].length; j++) {
            System.out.println(c1[i][j]+" ");
        }
        System.out.println();
    }
```

遍历二维数组:

动态初始化

```java
//动态初始化
int[][] c3 = new int[2][3];//两行三列的数组

//练习：遍历数组，随机为数组的元素赋值【1，9】
    Random random=new Random();
    //控制行
    for (int i = 0; i <2 ; i++) {
        //控制列
        for (int j = 0; j <3 ; j++) {
            c3[i][j]=random.nextInt(9)+1;
        }
    }
```

1. 3-4----------4-3

```java
//练习:先定义一行三列的数组.随机为数组元素赋值,[10, 99]
//练习:把上面的数组的列行交换,存一个数组中
int c5[][] = new int[3][4];
Random random = new Random();
for (int i = 0; i < 3; i++) {
    for (int j = 0; j < 4; j++) {
        c5[i][j] = random.nextInt( bound: 90) + 10;
        System.out.print(c5[i][j] + "  ");
    }
    System.out.println();
}
int c6[][] = new int[4][3];
for (int i = 0; i < 4; i++) {
    for (int j = 0; j < 3; j++) {
        c6[i][j] = c5[j][i];
        System.out.print(c6[i][j] + "  ");
    }
}
```

2.先定义两个个3-5列的数组,两个数组相加给第三个数组

```java
int c7[][] = new int[3][5];
int c8[][] = new int[3][5];
for (int i = 0; i < 3; i++) {
  for (int j = 0; j < 5; j++) {
  c7[i][j] = random.nextInt(5) + 1;
  c8[i][j] = random.nextInt(5) + 1;
  System.out.print(c7[i][j] + "  " + c8[i][j] + " ");

  }
  System.out.println();
}
int c9[][] = new int[3][5];
for (int i = 0; i < 3; i++) {
  for (int j = 0; j < 5; j++) {
  c9[i][j] = c7[i][j] + c8[i][j];
  System.out.print(c9[i][j] + "  ");

  }
  System.out.println();
}
```

3. 6行8列[10, 20], 打印第三列

```
1  int b2[][] = new int[6][8];
2  for (int i = 0; i < 6; i++) {
3    for (int i1 = 0; i1 < 8; i1++) {
4    b2[i][i1] = random.nextInt(11) + 10;
5    System.out.print(b2[i][i1] + " ");
6    }
7    System.out.println();
8  }
9  for (int i = 0; i < 6; i++) {
10   System.out.print(b2[i][2]+" ");
11  }
12  for (int i1 = 0; i1 < 6; i1++) {
13   System.out.print(b2[5][i1]+" ");
14  }
```