

Exercise: Print Backwards

Write a program that asks the user for 5 integers, and then prints the list of numbers in reverse order

How do we break this into steps?

Exercise: Print Backwards

Write a program that asks the user for any number of integers and prints them in reverse order.

2D Arrays

1D array:

`int[] a = { 10, 20, 30 };`

2D array:

`int[][] b = {`

`{ 10, 20, 30 },`

`{ 40, 50, 60 } row 1`

`};`



how do we access 50?

`b[1][1]`

Traverse a 2D Array

```
int[][] b = {
```

```
    {10, 20, 30},
```

```
    {40, 50, 60}
```

```
};
```

```
for(int row = 0; row < b.length; row++)
```

```
    for(int col = 0; col < b[row].length; col++)
```

```
        println(b[row][col])
```

Sum Every Element

```
int[][] b = {
```

```
    {10, 20, 30},
```

```
    {40, 50, 60}
```

```
};
```

```
int sum = 0;
```

```
for (int row = 0; row < b.length; row++)
```

```
    for (int col = 0; col < b[row].length; col++)
```

```
        sum += b[row][col];
```

Find the Max

```
int[][] b = {
```

```
    {10, 20, 30},
```

```
    {40, 50, 60}
```

```
};
```

```
int max = 0;
```

```
for(int row = 0; row < b.length; row++)
```

```
    for(int col = 0; col < b[row].length; col++)
```

```
        if(b[row][col] > max) {
```

```
            max = b[row][col];
```

```
        }
```

Count #s ≥ 30

int[][] b = {

{10, 20, 30},

{40, 50, 60}

};

int count = 0;

for(int row = 0; row < b.length; row++)

for(int col = 0; col < b[row].length; col++)

if (b[row][col] ≥ 30 {

count++;
}