

1. Write an **enhanced for loop** which prints the contents of the 2D double array `nums` in columns and rows with a space between each value as shown to the right. The data shown is an example, only, do not assume the array contains those values or that it has that number of rows or columns.

```
double[][] nums = //contains valid data;
```

(Sample output only.)

```
1.1 2.3 1.5 6.2 0.9 9.1
1.1 2.3 1.5 6.2 0.9 9.1
1.1 2.3 1.5 6.2 0.9 9.1
```

2. Create a 2D int array that is 5 rows by 10 columns:

3. Write the default value of each type of 2D array:

```
double:
int:
String:
Frog:
```

4. Write an array initializer that creates a 2D String array that contains these values arranged as shown (each letter is its own element):

```
c a t
d o g
```

5. Without looking at your repl from Monday, given the `Light` class to the right, write code to create a 5 by 100 2D `Light` array named **partyLights** of instantiated `Light` objects.

```
public class Light
{
    private String color;

    public Light()
    {
        int c = (int) (Math.random()*3);
        if(c==0)
            color="red";
        else if(c==1)
            color="green";
        else
            color="blue";
    }

    public String getColor()
    {
        return color;
    }
}
```

6. Write a static int method **columnCount** that searches a 2D Light object array of any size and returns how many columns in the array happen to be all the same color.

7. Write a static boolean method "eachColorPresent" which accepts a 2D array of Light objects and returns true if the 2D array contains at least one of each color (red, green blue), false otherwise.