Name: _____ CS3611 – 2D Array Practice

Determine the contents of each array after the code segment is executed.

1)
```
int[,] matrix = new int[3, 3];
for (int i = 0; i < 3; i++)
{
    for (int j = 0; j < 3; j++)
    {
        matrix[i, j] = i * 3 + j + 1;
    }
}
```

2)
```
int[,] matrix = { { 1, 2, 3 }, { 4, 5, 6 }, { 7, 8, 9 } };
for (int i = 0; i < 3; i++)
{
    matrix[i, 0] = 0;
}
```

3)
```
int[,] matrix = new int[2, 2];
matrix[0, 0] = 1;
matrix[0, 1] = 2;
matrix[1, 0] = 3;
matrix[1, 1] = 4;
matrix[1, 0] = 5;
```

4)
```
int[,] matrix = new int[2, 3];
for (int i = 0; i < 2; i++)
{
    for (int j = 0; j < 3; j++)
    {
        matrix[i, j] = i + j;
    }
}
```

5)
```
int[,] matrix = { { 1, 2, 3 }, { 4, 5, 6 }, { 7, 8, 9 } };
for (int i = 0; i < 3; i++)
{
    for (int j = 0; j < 3; j++)
    {
        if (matrix[i, j] % 2 == 0)
        {
            matrix[i, j] = 0;
        }
    }
}
```

6)
```
int[,] matrix = new int[3, 3];
int value = 1;
for (int i = 0; i < 3; i++)
{
    for (int j = 0; j < 3; j++)
    {
        matrix[i, j] = value;
        value++;
    }
}
```

7)
```
int[,] matrix = new int[2, 2] { { 1, 2 }, { 3, 4 } };
for (int i = 0; i < 2; i++)
{
    for (int j = 0; j < 2; j++)
    {
        matrix[i, j] *= 2;
    }
}
```

8)
```
int[,] matrix = new int[3, 3];
for (int i = 0; i < 3; i++)
{
    for (int j = 0; j < 3; j++)
    {
        matrix[i, j] = (i + 1) * (j + 1);
    }
}
```