Problem 4. Make a checkerboard matrix

Given an integer n, make an n-by-n matrix made up of alternating ones and zeros as shown below. The a(1,1) should be 1.

Example:

```
Input  n = 5

Output a is [1 0 1 0 1

0 1 0 1 0

1 0 1 0 1

0 1 0 1 0

1 0 1 0 1]
```

```
n = 5;
```

```
n = 5
```

```
a = [1 0 1 0 1
     0 1 0 1 0
     1 0 1 0 1
     0 1 0 1 0
     1 0 1 0 1];
result = checkerboard(n)
```

```
result = 5×5
     1     0     1     0     1
     0     1     0     1     0
     1     0     1     0     1
     0     1     0     1     0
     1     0     1     0     1
```

```
assert(isequal(result,a))
```

```
function a = checkerboard(n)
  a = zeros(n);
  a(1:2:end,1:2:end) = 1;
  a(2:2:end,2:2:end) = 1;
end
```