Program_05_4

Requirements

Create matrices `a, b, c, d, and e` as efficiently as you possibly can such that they appear as shown in the Output section below.

- **DO NOT** use brute force, creating matrices manually with bracket or colon notation.
- You may **ONLY** use subscript notation and functions.
- Colon notation is allowed in subscripts. ex: `a(1:5,3:5)= 0;`

Program

In the code block below, create your program, editing the existing text as necessary.

Tips:

Some functions you may find useful are as follows, though you're welcome to find

- ones()
- zeros()
- eye()
- flipud()
- fliplr()
- repmat()
- rot90()

Note: If you are using Octave then you will need to create a separate script file, save that separate file as the name **Program_05_04**. It will not conflict with this file of the same name since the extension will be different.

```
% Filename: Program_05_4
% Author:
% Assisted by:

% Program Description:
```

Example Output

Your program output should match the following.

Output for Program_05_4 written by Geoff Berl.

a =

```
     0     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0     0
     0     0     1     1     1     1     1     1     1     1     0     0
     0     0     1     1     1     1     1     1     1     1     0     0
     0     0     1     1     0     0     0     0     1     1     0     0
     0     0     1     1     0     0     0     0     1     1     0     0
     0     0     1     1     0     0     0     0     1     1     0     0
     0     0     1     1     0     0     0     0     1     1     0     0
     0     0     1     1     1     1     1     1     1     1     0     0
     0     0     1     1     1     1     1     1     1     1     0     0
     0     0     0     0     0     0     0     0     0     0     0     0
     0     0     0     0     0     0     0     0     0     0     0     0
```

b =

```
     1     1     1     1     1     1     1     1     1     1     1     1
     1     0     0     0     0     0     0     0     0     0     0     1
     1     0     0     0     0     0     0     0     0     0     0     1
     1     0     0     0     0     0     0     0     0     0     0     1
     1     0     0     0     0     0     0     0     0     0     0     1
     1     0     0     0     0     0     0     0     0     0     0     1
     1     0     0     0     0     0     0     0     0     0     0     1
     1     0     0     0     0     0     0     0     0     0     0     1
     1     0     0     0     0     0     0     0     0     0     0     1
     1     0     0     0     0     0     0     0     0     0     0     1
     1     1     1     1     1     1     1     1     1     1     1     1
```

c =

```
     1     0     0     0     0     0     0     0     0     0     0     1
     0     1     0     0     0     0     0     0     0     0     1     0
     0     0     1     0     0     0     0     0     0     1     0     0
     0     0     0     1     0     0     0     0     1     0     0     0
     0     0     0     0     1     0     0     1     0     0     0     0
     0     0     0     0     0     1     1     0     0     0     0     0
     0     0     0     0     0     1     1     0     0     0     0     0
     0     0     0     0     1     0     0     1     0     0     0     0
     0     0     0     1     0     0     0     0     1     0     0     0
     0     0     1     0     0     0     0     0     0     1     0     0
     0     1     0     0     0     0     0     0     0     0     1     0
     1     0     0     0     0     0     0     0     0     0     0     1
```

```
d =

     0     0     1     1     0     0     0     0     1     1     0     0
     0     0     1     1     0     0     0     0     1     1     0     0
     1     1     1     1     1     1     1     1     1     1     1     1
     1     1     1     1     1     1     1     1     1     1     1     1
     0     0     1     1     0     0     0     0     1     1     0     0
     0     0     1     1     0     0     0     0     1     1     0     0
     0     0     1     1     0     0     0     0     1     1     0     0
     0     0     1     1     0     0     0     0     1     1     0     0
     1     1     1     1     1     1     1     1     1     1     1     1
     1     1     1     1     1     1     1     1     1     1     1     1
     0     0     1     1     0     0     0     0     1     1     0     0
     0     0     1     1     0     0     0     0     1     1     0     0


e =

     1     1     0     0     1     1     0     0     1     1     0     0
     1     1     0     0     1     1     0     0     1     1     0     0
     0     0     1     1     0     0     1     1     0     0     1     1
     0     0     1     1     0     0     1     1     0     0     1     1
     1     1     0     0     1     1     0     0     1     1     0     0
     1     1     0     0     1     1     0     0     1     1     0     0
     0     0     1     1     0     0     1     1     0     0     1     1
     0     0     1     1     0     0     1     1     0     0     1     1
     1     1     0     0     1     1     0     0     1     1     0     0
     1     1     0     0     1     1     0     0     1     1     0     0
     0     0     1     1     0     0     1     1     0     0     1     1
     0     0     1     1     0     0     1     1     0     0     1     1
```