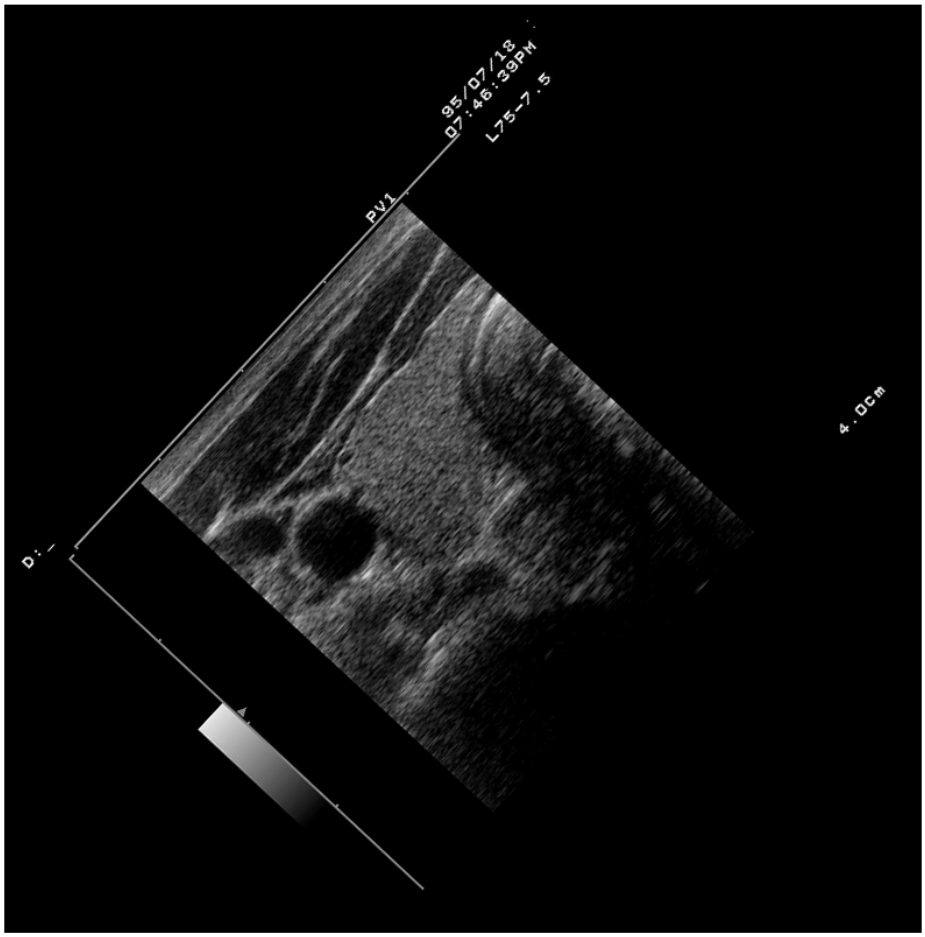
Quetion 3

*Uses imrotate to write a MATLAB script that reads an image, rotates it by an arbitrary angle using bilinear interpolation. The script di8splays the amount of rotation in degrees, the name of the interpolation method, and associated processing time using the tic and toc functions.

```
close all; clear; clc;
tic
fName = 'us_19773.pgm';
I = imread(fName);
deg = 47;
method = 'bilinear';
I_rot = imrotate(I,deg, method);
imshow(I_rot);
disp(['Output: ', fName, ', ', int2str(deg),', ', method])
t = toc;
elapsed = sprintf(['The elapsed time for rotation of the image '
 fName ', at ' int2str(deg) ' degrees, using ' method, ' interpolation
 is ', num2str(t), ' seconds']);
disp(elapsed)
```

```
Output: us_19773.pgm, 47, bilinear
The elapsed time for rotation of the image us_19773.pgm, at 47
 degrees, using bilinear interpolation is 2.0058 seconds
```



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