Lab 2 Task 2

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discussion posted a day ago by carlos_sv

I use reshape and sum. Solution in two lines.
However I lost a lot of time because I was not squaring the numbers correctly.

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rocket

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a day ago

x is longer than what we wanted. How do you discard the extra elements in vector x?

You're given the frame length 256, you're also given the number of frames thus you can get the total number of required samples. In other word how many elements of of vector **x** you require. What next?

Use indexing, all you need to know, with examples are here.
http://uk.mathworks.com/company/newsletters/articles/matrix-indexing-in-matlab.html
Far less work than loops, which seem to be the goto solution of choice. The matlab help pages are concise with plenty of examples.
Throw in
http://uk.mathworks.com/help/matlab/ref/reshape.htm
and
http://uk.mathworks.com/help/matlab/ref/sum.html
and you're home and dry, with not a loop in sight. All the other information needed to complete this task is in the lab instructions.
Remember, to square the *elements* of matrix a **A** (Element-wise square) ,
write **A.^2**

posted about 2 hours ago by aredirl

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WordyAllen

a day ago

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indexing makes code more mathy and less loopy. use it liberally

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KarenWest

about an hour ago

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Does anyone know what I'm doing incorrectly when summing the squares and dividing by the frame length? My power is coming out incorrectly. Here is my code snippet.

```
% % % % Revise the following code  % % % %
num = num_frames * frame_length;
x_reshape = x(1:num);
y_framed = reshape(x_reshape, [frame_length, num_frames]);
%power of a signal is the sum of squares of its samples divided by the signal length
frame_power = [];
for frameNum = 1:num_frames,
    value = y_framed(frameNum);
    sqrYFrame = value.^2;
    sumSqrYFrame = sum(sqrYFrame);
    frameNumPower = sumSqrYFrame / frame_length;
    frame_power = [frame_power frameNumPower];
end

% % % % Do not change the code below % % % %
```

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PREVIEW

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