```
function YUVFrame  = frameRGB2YUV( RGBFrame )
```

Instruction

this function simply transforms a RGBframe to its corresponding YUVframe input RGBframe, size == [frameHeight * framewidth * 3]

```
% output
% YUVframe, size == [frameHeight * framewidth * 3]
% For Question 5 in specification, U and V should have only 25% size of Y

RGBFrame = double(RGBFrame); %Otherwise values are clipped in the converting proce
R = RGBFrame(:,:,1);
G = RGBFrame(:,:,2);
B = RGBFrame(:,:,3);

%Constans from lectures.
Y = 0.299 * R + 0.587 * G + 0.114*B;  %Process each channel individually.
U = 0.492 * (B-Y);
V = 0.877 * (R-Y);

YUVFrame = cat(3, Y, U, V); %Put it back together.

end
```

Published with MATLAB® R2014b