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[code]Image Compression

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Extract Y channel from RGB

- Example Code

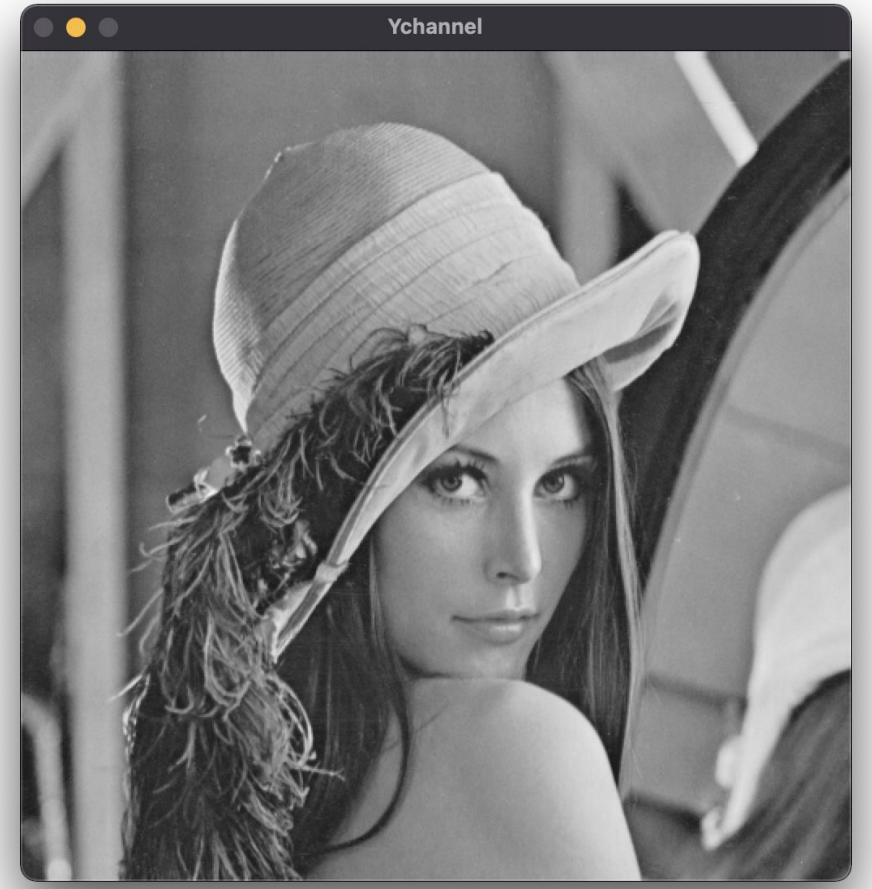
```
int main(int argc, char* argv[])
{
    Mat image;
    Mat image_Ycbcr;
    Mat Ycbcr_channels[3];
    Mat y(512, 512, CV_8UC1);

    image = imread("lena.png", IMREAD_COLOR);
    cvtColor(image, image_Ycbcr, CV_BGR2YCrCb);
    split(image_Ycbcr, Ycbcr_channels);

    for (int j = 0; j < 512; j++){
        for (int i = 0; i < 512; i++)
            {
                y.at<uchar>(j, i) = 0;
                y.at<uchar>(j, i) = Ycbcr_channels[0].at<uchar>(j,i);
            }
        }

    imshow("Ychannel", y);

    waitKey(0);
    return 0;
}
```



OpenCV DCT Function

- Perform a discrete cosine transformation of 1D/2D array.
  - void dct(InputArray src, OutputArray dst, int flags=0)
    - src: input floating-point array.
    - dst: output array of the same size and type as src.
    - flags: If (flags & DCT_INVERSE) == 0 , the function does a forward transform. Otherwise, it is an inverse transform.