

# Explanations regarding output images

## 0. How to compile

```
gcc -Wall -O2 -o YCbCr YCbCr.c -lm
```

## 1. Problem b

When  $S = 2$ , we can see some unnatural artifacts at the edge of the red parrot.

When  $S = 4$ , we can see small color blocks at the grass and the edge of both parrots.

When  $S = 8$ , color blocks become bigger all over the image.

## 2. Problem c

$S = 1, 768 * 512 * 24 = 9437184 \text{ bits}$

$S = 2, 768 * 512 * (8 + 16/4) = 4718592 \text{ bits}$

$S = 4, 768 * 512 * (8 + 16/16) = 3538944 \text{ bits}$

$S = 8, 768 * 512 * (8 + 16/64) = 3244032 \text{ bits}$