## Worksheet/Homework for Lecture 14/15

Comments and/or partial solutions are due by Monday morning. Full solutions are due by Thursday night.

## Problems:

1. Consider the signal $x=[1,4,2,3,6,4,9,10]$. Let $s, d$ be the trend and detail for the $C D F(2,2)$ transform applied to $x$. What is $s[2]$ ? What is $d[3]$ ?
2. Give an expression for the matrix $D U P$ using matrix multiplication (i.e. the $C D F(2,2)$ analysis matrix, ignoring the "split" part).
3. Write down a wavelet basis for the $C D F(2,2)$ transform in the case $N=8$.
