



## ET601: Problem Set 1 Solution

1.

A =

1	1	1	1	0
1	0	1	0	1
0	0	0	1	1
1	1	1	0	1

The following expressions can be used to take the boxed part and assign it as a matrix B.

- $B = A([2,3],[3,4,5])$
- $B = A(2:3,3:5)$
- $B = A(2:3,3:end)$
- $B = A(2:(end-1),3:end)$
- $B = [A(2,3:5) ; A(3,3:5)]$

2.

- a.  $x = 1:7$
- b.  $y = \text{cumsum}(x)$
- c.  $y = x .* (x+1) / 2$

3. The following script are added:

```
% Part (a)
NT = (1:N)-NH; % The number of teads is simply
                % the number of trials (so far) subtracts
                % the number of heads

hold on
plot(NT./(1:N),'r') % Plot the relative frequencies for the tails
% Part (b)
figure
plot(NH-NT)
```