# Sirindhorn International Institute of Technology <br> Thammasat University at Rangsit 

School of Information, Computer and Communication Technology

## ET601: Problem Set 1 Solution

1. 

$A=$|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| 1 | 1 | 1 | 1 | 0 |
| 1 | 0 | 1 | 0 | 1 |
| 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. $y=\operatorname{cumsum}(x)$
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)
```

