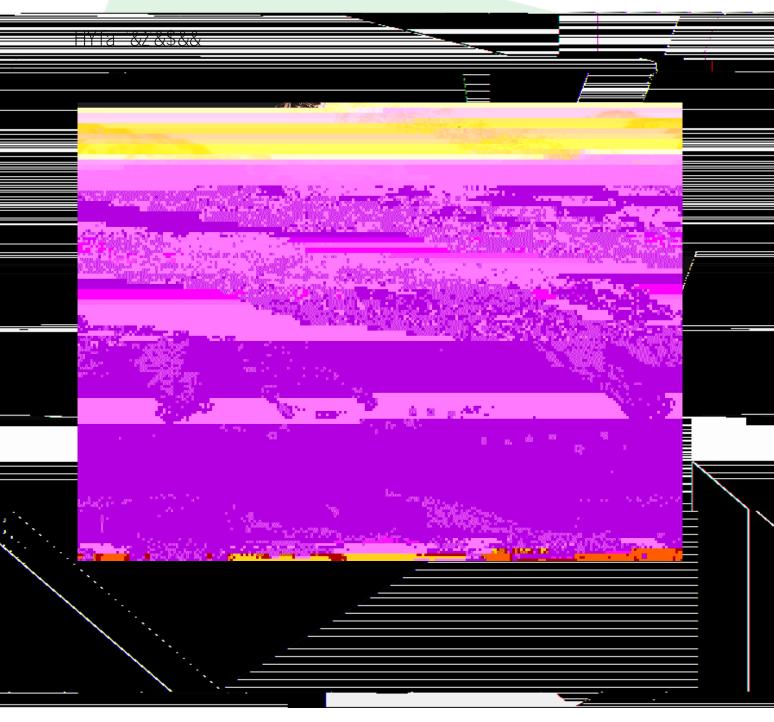
# EDST5037

# 9XiWUhjcbDfcYWi&



EDST5037 // Term 2, 2022 // published at 11-03-2022 © UNSW Sydney, 2022

# 7 ci fgY<sup>-</sup>Cj Yfj ]Yk

### GHJZZ7cbHJWh78YHJ]`g

#### 7cbj Ybcfg

| BUa Y         | 9a U]`                          | 5j U]`UV]`]hm | @cWUh]cb | D∖cbY |
|---------------|---------------------------------|---------------|----------|-------|
| HYffmi7iaa]b[ | <u>h'Waa]b[4 i bgk "YXi "Ui</u> |               |          |       |

#### GW&cc`7cbHJWhi=bZcfaUh]cb

GW&cc``cZ9XiWUh]cb 5fhgž'8Yg][b'UbX'5fW&]hYWhifY ; fcibX': `ccfž'A cfjYb'6fckb'6i]`X]b[`fl&\$Ł

H. 'Ž \* %'f&Ł'- ' , ) '%- ++

9. YXi WUhjcb4 i bgk "YXi "Ui

K. \hhdg.#k k k "Ufng"i bgk "YXi "Ui #YXi WUh]cb

### 5W\_bck `YX[ Ya YbhcZ7ci bhfm

I BGK '5ffgž8Yg][b'UbX'5fW]HYWi fY'?Ybg]b[hcb'UbX'DUXX]b[hcb'WJa di gYg'UfY'Vi ]`hcb'5Vcf][]bU` @UbXg"'K Y'dUmci f`fYgdYWg'hc'h\Y'6]X'][U``UbX'; UX][U``dYcd`Yg'k \c'UfY'h\Y'7 i ghcX]Ubg'cZh\YgY``UbXg" K Y'UW\_bck `YX[Y'h\Y'5Vcf][]bU``UbX'HcffYg'GHfU]h=g`UbXYf'dYcd`Ygž'h\Y': ]fgh5i gHfU`]Ubgž'k \cgY``UbXgž k ]bXg'UbX'k UHYfg'k Y'U```bck 'g\UfYž'UbX'dUmfYgdYWhc'h\Y]f'i b]ei Y'j U`i Ygž'UbX'h\Y]f'Wcbh]bi ]b[`UbX YbXi f]b[`W'`h fYg'k \]W\XYYdYb'UbX'Ybf]W\'h\Y'`]ZY'cZci f`bUh]cb'UbX'Wca a i b]h]Yg"``

∵a U[Y`WcifhYgmicZh\Y`CZ]WY`cZh\Y`Dfc`J]WY!7\UbWY``cf`ŧbX][Ybcig`<u>LBGK\_fog`ŧbX][Ybcig`ghfUhY[m</u>

# 7ci fgY<sup>·</sup>8YHJ]`g

### l b]hg cZ7fYX]h\*\*

### Kcf\_`cUX

%) \$`\ci fg`]bWi X]b[`WUgg`WebHUWi\ci fgžfYUX]b[gžWUgg`dfYdUfUH]cbžUggYgga YbHžZe``ck`i d`UW1jj]H]Ygž YHW

### Gi a a UfmcZhXY7ci fgY

H\Y'di fdcgY'cZh\]g'Vci fgY']g'hc'dfcj ]XY'mci 'k]h\`Ub'cddcfh b]hmhc``YUfb'\ck 'hc'dfYdUfY'U'fYgYUfVX dfcdcgU``]b'YXi WUhjcb'''H\]g'Vci fgY'fYj ]Yk g'h\Y'ghYdg']b'h\Y'fYgYUfVX'dfcW/gg'UbX'Wcbg]XYfg'h\Y Y'Ya Ybhgž'ghfi Whi fY'UbX'cf[Ub]gUhjcbž'UbX'k f]hjb['ghmY'cZfYgYUfVX'dfcdcgU'g']b'YXi WUhjcb'''=hik]``YbUV'Y mci 'hc'd'Ub'YXi WUhjcbU``fYgYUfVX'UbX'ci hjbY'h\Y'ghYdg'i g]b['Uddfcdf]UhY'ghfi Whi fY'UbX'cf[Ub]gUhjcb''DbX k f]hjb['ghmY'Zcf'U'fYgYUfVX'dfcdcgU``]b'YXi WUhjcb'''=hik]```Ugg]ghmci 'k]h\`dfYdUf]b['mci f'dfcdcgU``Zcf WcbZjfa Uhjcb'Ug'k Y```Ug'mci f'cfU``dfYgYbfUhjcb''

8i f]b[ 'h,]g'HYfa žmci 'k]``kcf\_'df]a Uf]`mk]h, mci f`gi dYfj]gcfg'hc'dfYdUfY'Zcf'mci f`WcbZ]fa Uh]cb']b'HYfa '' " 7 cbZ]fa Uh]cb'Wcbg]ghg'cZdfYgYbhUh]cb'cZmci f`fYgYUfW\'dfcdcgU``hc'mci f`WcbZ]fa Uh]cb'dUbY``hc[ Yh\Yf`k]h Ub'cfU``dfYgYbhUh]cb'cb'mci f`dfc'YWf

BchY. H\]g'Wci fgY']g'cb`mUj U]`UV`Y'hc'9XDf8cWgh XYbhg"

### 7cifgY'@YUfb]b['CihWcaYg

%"

# 5ggYgga Ybh

| 5ggYgga YbhˈHJg_           | K Y][ \h | 8iY'8UHY                | 7cifgY`@YUfb]b[<br>CihWcaYgʻ5ggYggYX |
|----------------------------|----------|-------------------------|--------------------------------------|
| %"`8fUZriFYgYUfVX`DfcdcgU` | *\$I     | %#\$+#&\$&&`\$).\$\$`DA | %ž' &ž''                             |
| &"`FYgYUfW&DfYgYbHUh]cb    | (\$1     | Bch5dd`]WUV`Y           | %ž' &ž''                             |

#### 5ggYgga Ybh% 8fUZhF YgYUfW DfcdcgU`

8i Y'XUhY. % #\$+#&\$&&\*\$).\$\$\*DA

HUg\_`%`8fUZriU`fYgYUfW\`dfcdcgU`

EiU`]hUh]jY`UbX`eiUbh]hUh]jY`ZYYXVUW\_`k]``VY`cb[c]b[`VYZcfYžXif]b[`UbX`UZhYf`h\Y`XUhU`Wc``YWf]cb"

H\]gʻUgg][ ba Ybhi]gʻgi Va ]hhYXʻh\fci [ \`Hi fb]h]bʻUbXʻghi XYbhgʻWUbʻgYYʻHi fb]h]bʻg]a ]`Uf]hmifYdcfhgʻʻ

#### 5XX]h]cbU``XYHJ]`g

5 fYgYUfW dfcdcgU gi Va ]hh X Ug U WcbZfa Uhjcb cZWUbX]XUhi fY XcW a Ybh

Gi Va ]gg]cb'cZ5ggYgga Ybh'%k ]``VY'UZhYf'fY[i`Uf'Wcbgi`hUh]cb'k ]h\ mci f'gi dYfj ]gcfg'UbX'cbWY'h\YmUfY gUh]gZ]YX'h\UhH\Y'fYgYUfW\'dfcdcgU``]g'fYUXmZcf'WcbZ]fa Uh]cb''`#ik ]``HU\_Y'd`UWY'UVci hik c'k YY\_g'df]cf'hc h\Y'UXj Yfh]gYX'WcbZ]fa Uh]cb'XUhYg'UbX'ghi XYbhg'k ]``VY'UXj ]gYX'cb'\ck 'hc'i d`cUX'h\Y]f'XcW a Ybhg'hc ; F=G"

#### 5ggYgga Ybh& FYgYUfW DfYgYbHJh]cb

GHJfh'XUhY. \$%#\$, #&\$&&\$).\$\$`DA

HUg\_'&.'CfU``dfYgYbHJHjcb`cZh\YfYgYUfW\`dfcdcgU``Zcf`U`gaU```fYgYUfW\`dfcYWf``EiU`]HJHj Y`UbX eiUbHjHJHj Y`ZYYXVUW\_'k]h\]b`%\$`XUmg`cZgiVa]gg]cb"

EiU`]hUhjjY`UbX`eiUbhjhUhjjY`ZYYXVUW\_`k]``VY`cb[c]b[`VYZcfYžXif]b[`UbX`UZhYf`h\Y`XUHU`Wc``YWfjcb"

H\]g`]g`h\Y`Z]bU``UggYgga Ybh

#### 5XX]h]cbU``XYHJ]`g

Mci 'k]``dfYgYbhHUg\_'&'Ug'U'%) 'a]bi hY'cfU`'dfYgYbhUhJcb'cb'h\Y'XUmcZWcbZfa UhJcb'fYj]Yk "

Gi WWYggZ ``WcbZfa Uh]cb`cZWUbX]XUhi fY`k]``VY`XYhYfa ]bYX`h\fci [\`h\Y`WcbZfa Uh]cb`fYj]Yk "

| GdYWJZJW7f]HYf]U                                       | tlf | –2fŽŁ |
|--|-----|-------|
| ; YbYfU`Wca a Ybhg#fYWca a YbXUh]cbg'Zcf'bYI h'h]a Y.' |     |       |
|  |     |       |
|  |     |       |
|  |     |       |

FYWcaaYbXYX. #&\$`fl@`DG`7F`8B`<8Ł KY][\h]b[. \*\$i

B6. H\Y'HW\_g']b'H\Y'j Uf]ci g'Vcl Yg'UfY'XYg][ bYX'hc'dfcj ]XY'ZYYXVUW\_'hc'ghi XYbhg/H\YmUfY'bchi[ ]j Yb Yei U`'k Y][ \h]b'XYHYfa ]b]b['H\Y'fYWca a YbXYX'[ fUXY''8YdYbX]b['cb'H\Y'bUhi fY'cZH\Y'UggYgga YbHUg\_ž 'YWhi fYfg'a UmU`gc'WcbHYI hi U`]gY'UbX#cf'Ua YbX'H\YgY'gdYWJ]WVf]HYf]U''<u>H\Y'fYWca a YbXYX'[ fUXY']g</u> HYbHUHj Y'cb`mž'gi V'YWhc'gHUbXUfX]gUHjcb'dfcWfggYg'UbX'Uddfcj U``VmH\Y'GW\cc``cZ9Xi WUHjcb'@YUfb]b[ UbX'HYUW\]b['7 ca a ]HYY"

| FYWca a YbXYX.           | #&\$`f]@`DG`7F`8B`<8Ł  | K Y][∖h]b[. | (\$1       |          |
|--------------------------|------------------------|-------------|------------|----------|
| ₿6. H\Y`h]W_g`]b`h\Y`j - | f∖ci"hVcl <b>†</b> hYf | †]bb jc dfc | <b>†</b> Z | Y]bjcgji |

### 

#### GWLcc``cZ'9Xi WUhjcb`5hHYbXUbWY`FYei ]fYa Ybh

H\Y'GW\cc``cZ9XiWUHjcb`fG98EfYei]fYg`ghiXYbhg`aYYhU`a]b]aia`UhhYbXUbWY`fYei]fYaYbhcZ, \$i`cZU`` gW\YXi`YX`WUggYg`f]"%"`YWhifYgžhihcf]U`gžk cf\_g\cdgžgYa]bUfgEiZcf`U``WcifgYg"`5hHYbXUbWY`]b`dYfgcb`]g

### FYgci fWg

#### DfYgWf]VYX F Ygci fWfg

5```ghi XYbhg`UfY`YI dYWYX`hc`UWWYgg`h\Y`Wci fgYfg`A ccX`Y`g]hY`cb`U`fY[i`Uf`VUg]g`Zcf`Wci fgY`a UhYf]U`gž ]bZcfa Uh]cbž`UbX`Ubbci bWYa Ybhg"

H\YfY'UfY'bc'dfYgWf]VYX'hYI hg"'GYY'A ccX'Y'Zcf'fYWca a YbXYX'hYI hg'UbX'h\Y'fYUX]b['gW\YXi `Y"

#### 7ci fgY'9j U`i Uh]cb'UbX'8Yj Y`cda Ybh

Ghi XYbhiZYXVUW\_'k]```VY`[Uh\YfYX`Zcfa U``mih\fci [\`A m91 dYf]YbWY`gi fj Ymg`UbX`ghi XYbhWcbgi `hUh]cb Wca a ]hhYYg`UbX`]bZcfa U``mih\fci [\`Ya U]``UbX`cb`]bY`a YYh]b[`'W\YW\_!]bg"

# Gi Va ]gg]cb cZ5ggYgga YbhHUg\_g

# Hi fb]h]b Gi Va ]gg]cb

Zmci YbWci bhYf'U'dfcV'Ya 'k \Yb'UhYa dhjb[ 'hc'gi Va ]hmci f'Ugg][ ba YbhN fci [ \ 'Hi fb]hjbžd'YUgY hY'Yd\cbY'9I hYfbU'`Gi ddcfhcb'-', ) '' ' '%cf'Ya U]`'h\Ya 'cb'YI hYfbU'hY'hgi ddcfh4 i bgk "YXi "Ui '"'Gi ddcfh \ci fg'UfY', .\$\$Ua '-'%\$.\$\$da 'cb'k YY\_XUmg'UbX'-.\$\$Ua '-') .\$\$da 'cb'k YY\_YbXg'fl \*) 'XUmg'U'mYUfŁ'' Zmci UfY'i bUV'Y'hc'gi Va ]hmci f'Ugg][ ba YbhXi Y'hc'U'ZJi `hk ]h\'Hi fb]hjb'mci 'a UmUdd`mZcf'Ub'YI hYbg]cbžVi hmci a i ghfYhU]b'mci f'hjW\_Yhbi a VYf'Zfca '9I hYfbU'`Gi ddcfhfU'cb[ 'k ]h\ 'Ubmch\Yf'fY'Yj UbhXcW a YbhgŁhc ]bWi XY'Ug'Yj ]XYbWY hc'gi ddcfhmci f'YI hYbg]cb'Udd`]WUh]cb'' Zmci 'Ya U]`'9I hYfbU'`Gi ddcfhimci 'k ]`` Ui hca UhjWU'`mfYWY]j Y'U'hjW\_Yhbi a VYfžVi h]Zmci 'hY`Yd\cbY'mci 'k ]``bYYX'hc'gdYWJZWU``mUg\_'Zcf'cbY" Hi fb]hjb'U`gc'dfcj ]XYg'i dXUhYg'cb'h\Y]f'gmghYa 'gfUh'g'cb'Hk ]hYf"

; YbYfU``mž'UggYgga YbhHUg\_g`a i ghVY`gi Va ]HYX`Y`YWfcb]WU``mj ]U`Y]H\Yf`Hi fb]h]b`cf`U`A ccX`Y Ugg][ ba YbH'`=b`]bgHUbWfg`k \YfY`H\]g`]g`bchdcgg]V`Yž`]hk ]```VY`gHUHYX`cb`mci f`Wci fgY**'**g`A ccX`Y`g]HY`k ]H\ U`HYfbUh]j Y`gi Va ]gg]cb`XYHU]`g"

: cf`]bZcfa Uh]cb`cb`\ck `hc`gi Va ]hUgg][ ba Ybhg`cb`]bY`j ]U`A ccX`Y.`\hhdg.##gh XYbh'i bgk "YXi "Ui #\ck! gi Va ]hUgg][ ba Ybha ccX`Y

# 5WUXYa ]W<cbYghmUbX D`U[ ]Uf]ga

D`U[]Uf]ga `]g`i g]b[`H\Y`k cfXg`cf`]XYUg`cZcH\Yfg`UbX`dfYgYbh]b[`H\Ya `Ug`mci f`ck b"`=h\WUb`HU\_Y`a Ubm Zcfa gžZca `XY`]VYfUHY`W\YUH]b[`Hc`UWW]XYbHU``mWcdm]b[`Zfca `U`gci fWY`k]H\ci hUW\_bck `YX[Ya YbH'

#### I BGK '[fci dg'd`U[]Uf]ga ']bhc 'h\Y'Zc``ck ]b[ 'WUhY[cf]Yg.

7 cdm]b[.:1 g]b[`h\Y`gUa Y`cf`j Yfmg]a ]`Uf`k cfXg`hc`h\Y`cf][]bU``hYI h`cf`]XYU`k ]h\ci hUW\_bck `YX[]b[`'h\Y gci fWY`cf`i g]b[`ei chUh]cb`a Uf\_g"`H\]g`]bWi XYg`Wcdm]b[`a UhYf]U`gž]XYUg`cf`WcbWYdhg`Zca `U`Vcc\_ž'Ufh]WYž

# 5WUXYa]W=bZcfaUh]cb

8iY'hc'Yjc'j]b['UXj]WY'VmBGK '<YU'h\žghiXYbhg'aigh'W\YW\_'Zcf'idXUhYX']bZcfaUh]cb'fY[UfX]b['cb`]bY 'YUfb]b['Zcf'U``5fhgž'8Yg][b'UbX'5fW\]hYWhifY'WcifgYg'h\]g'hYfa'f]]U'AccX`Y'cf'WcifgY']bZcfaUh]cb dfcj]XYX''Ł

: cf<sup>\*</sup>YggYbhJU<sup>\*\*</sup>gh XYbh<sup>\*</sup>]bZcfa UhJcb<sup>\*</sup>fY<sup>\*</sup>UhJb[<sup>\*\*</sup>hc.

- fYei Yghg Zcf Yl hYbg]cb/
- `UhY`gi Va ]gg]cbg`[ i ]XY`]bYg/
- fYj ]Yk 'cZa Uf\_g/
- I BGK '<YU`h\`UbX'GUZYhmidc`]WjYg/
- YI Ua ]bUh]cb'dfcWYXi fYg/
- •