ECOO 2012 ROUND 3 QUESTIONS

May 12, 2012

Problem 1 – The Word Garden

FIRST TRY

Suggested Marking Scheme

Input file name: DATA11.txt

Award 20 marks for each exactly correct line of word trees. If all the individual word trees are formatted correctly but one or more are not placed correctly (exactly as shown) award 10 points for that line. If the ground has too many or too few characters (should be 40), deduct 5 points in each case.

Allow students to scroll or resize the output window. Allow them to present one row at a time under input control. If necessary, allow them to copy and paste their output to Notepad or a similar fixed-width font text editor. Unless a fixed-width font is used, the word trees will not look right.

Note that the rows of trees are presented side by side here with numbering, but will appear one after another in the students' output with no numbering.

Award 10 bonus marks if all 5 rows are correct.

```
1                                          2                   G
                                                              GeG
                                                            GeoeG              f
                                                           GeoroeG            fof
            d                                        h   GeorgroeG          forof
           drd                                      hih  GeorgigroeG        formrof
    h    drerd     t                             hilihGeorgiaigroeG s   formemrof
   hah  dreaerd   tht                             hilllih    G        sosformeremrof
  havahdreamaerdthaht  o    d     t               rhillsllih    e   t  sonos      f
 havevah    d    thatahtono  dad     tht          rer   h        o thtsonsnos    o
    h       r      t  onenodayadotheht           reder  i o      rtheht  s o      r
    a       e      h    o    d ono t               r    lofo     g  t     oofo    m
 I  va      a      a    n    a  o  h               e    l  o     i  h      n o    e
 I  ea      m      t    e    y  n  e               d    s f      a  e      s f    r
========================================          ========================================
```

3

```
  s                         f
 sls                       fof
 slals                    forof      s
slavals                  formrof    sls
slavevals          s   formemrof   slals
slavesevals       sosformeremrofslavals
     s   a    t  sonos    f   slavevals
     l ana  thtsonsnos    o      s
     aandnatheht  s o     r      l
     v   a    t  oofo   m        a
     e   n    h  n o    e        v
     s   d    e  s f    r        e
========================================
```

4

```
     o
   owo
  ownwo
  ownenwo
 ownerenwo  w      a          d
ownersrenwowiw    aba        dod
      o    wiliw  ablba   s dowod
      w  willliwablelbasisdownwod
      n     w b    a tsitis  d
      e     ibeb   btot s    o
      r     l b    l t  i    w
      s     l e    e o  t    n
======================================
```

5

```
               b
              brb
             brorb
            brotorb
           brothtorb
          brothehtorb
     t     brotherehtorb
    tot    brotherhrehtorb
   togot   brotherhohrehtorb
  togegot brotherhooohrehtorb
  togetegotbrotherhoodoohrehtorb
 togethtegot           b
 togethehtegot    t    r
togetherehtegot tat    o
       t       tabat    t
       o      tablbat   h
       g     ttablelbate
       e    tht    t     r
       t atheht   a  o   h
      hata t    bofo     o
      e  a  h    l o     o
      r  t  e    e f     d
========================================
```

ECOO 2012 ROUND 3 QUESTIONS

May 12, 2012

Problem 1 – The Word Garden

SECOND TRY

Suggested Marking Scheme

Input file name: DATA12.txt

Award 20 marks for each exactly correct line of word trees. If all the individual word trees are formatted correctly but one or more are not placed correctly (exactly as shown) award 10 points for that line. If the ground has too many or too few characters (should be 40), deduct 5 points in each case.

Allow students to scroll or resize the output window. Allow them to present one row at a time under input control. If necessary, allow them to copy and paste their output to Notepad or a similar fixed-width font text editor. Unless a fixed-width font is used, the word trees will not look right.

Note that the rows of trees are presented side by side here with numbering, but will appear one after another in the students' output with no numbering.

1

```
                                l
                               lil
        d                     litil
       drd                   litttil
   h    drerd    t       f littlttil
  hah  dreaerd tht     foflittlelttil
 havahdreamaerdthaht  fouof     l
havevah   d   thatahtfouruof    i
  h      r    t m     f         t
  a      e    hmym    o         t
I va     a    a m     u         l
I ea     m    t y     r         e
========================================
```

2

```
        c
       chc
      chihc
     chilihc
    childlihc                      n
   childrdlihc                    nan
  childrerdlihc                  natan
 childrenerdlihc                natitan
    c    w              l     natioitan
    h   wiw           lilnationoitan
    i wiliw   o    d  livil     n
   lwillliwono dadlivevil       a
    d    w  onenodayad l i      t
    r    i    o    d   iini      i
    e    l    n    a   v ia      o
    n    l    e    y   e na      n
========================================
```

3

```
                        j
                       juj
        w             juduj
      whw             judgduj
    whehw     t     w judgegduj
  wherehw   tht    wiw judgedegduj
whererehwtheht  wiliw   n     j     t
    w    theyehtwillliwnon    u     tht
    h        t     w  notonb d btheht
    e        h     i    n bebgbyb t
    r        e     l    o  b e b  h
    e        y     l    t  e d y  e
=======================================
```

4
```
   c
   coc
  coloc         t
 cololoc       tht
 colouoloc   theht     s
colouruoloctheieht   sks
    c     theiriehtskiks  b     t
    o        t    skiniksbub   tht
    l o      h      s  butubbtheht
    oofo     e      k     b byb t
    u o      i      i     u  b  h
    r f      r      n     t  y  e
=======================================
```

5
```
                        c
                       chc
                      chahc
                     charahc
          c         chararahc
        coc         characarahc
       conoc        charactcarahc
      contnoc       charactetcarahc
     contetnoc    tcharacteretcarahc
    contenetnoc  tht         c
contentnetnoctheht           h
        c     theieht        a
        o     theirieht      r
        n        t           a
        t o      h           c
        eofo     e           t
        n o      i           e
        t f      r           r
=======================================
```