

The image shows a Windows desktop with two open Python 3.7.0 Shell windows. The left window displays a recursive implementation of a binary tree traversal algorithm for a dataset of Indonesian cities. The right window shows the execution output, listing the cities in a specific order. The bottom status bar indicates the file is 'latihan.py' and the current line is 155.

Left Window (latihan.py):

```

9.5.py - D:\semester 4\praktikum algoritma struktur data\modul 9\9.5.py (3.7.0)
File Edit Format Run Options Window Help
from latihan import *

datalist = [A.data, B.data, C.data, D.data, E.data, F.data, G.data, H.data, I.data, level = []]

$9.5.1
#preorder traversal
def preordertrav(subpohon):
    if subpohon is not None:
        print(subpohon.data)
        preordertrav(subpohon.kiri)
        preordertrav(subpohon.kanan)

$9.5.2
#inorder traversal
def inordertrav(subpohon):
    if subpohon is not None:
        inordertrav(subpohon.kiri)
        print(subpohon.data)
        inordertrav(subpohon.kanan)

$9.5.3
#postorder traversal
def postordertrav(subpohon):
    if subpohon is not None:
        postordertrav(subpohon.kiri)
        postordertrav(subpohon.kanan)
        print(subpohon.data)

print(preordertrav(A))
print(inordertrav(A))
print(postordertrav(A))

```

Right Window (Python 3.7.0 Shell):

```

File Edit Shell Debug Options Window Help
Ambarawa
Bantul
Denpasar
Enrekang
Flores
Garut
Halmahera Timur
Indramayu
Halmahera Timur
Indramayu
Cimahi
Denpasar
Enrekang
Flores
Garut
Halmahera Timur
Indramayu
Halmahera Timur
Indramayu
Flores
Flores
Garut
Halmahera Timur
Indramayu
Halmahera Timur
Indramayu
Cimahi
Denpasar
Enrekang
Flores
Garut
Halmahera Timur
Indramayu
Halmahera Timur

```

Bottom Window (latihan.py):

```

latihan.py - D:\semester 4\praktikum algoritma struktur data\modul 9\latihan.py (3.7.0)
File Edit Format Run Options Window Help
class simpulphohonbiner(object):
    def __init__(self, data):
        self.data = data
        self.kiri = None
        self.kanan = None

A = simpulphohonbiner('Ambarawa')
B = simpulphohonbiner('Bantul')
C = simpulphohonbiner('Cimahi')
D = simpulphohonbiner('Denpasar')
E = simpulphohonbiner('Enrekang')
F = simpulphohonbiner('Flores')
G = simpulphohonbiner('Garut')
H = simpulphohonbiner('Halmahera Timur')
I = simpulphohonbiner('Indramayu')
J = simpulphohonbiner('Jakarta')

#menghubungkan simpul ortu anak
#gambar 9.5a
A.kiri = B; A.kanan = C
B.kiri = D; B.kanan = E
C.kiri = F; C.kanan = G
E.kiri = H
G.kanan = I

#gambar 9.5b
A.kiri = B; A.kanan = C
B.kiri = D; B.kanan = E
E.kiri = G
G.kanan = H
H.kiri = I
C.kanan = F

#gambar 9.5c
A.kanan = B
B.kanan = C
C.kiri = D
D.kanan = E
E.kiri = F
F.kanan = G
G.kiri = H

```