```
> run Assignment 4
Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
2- Print the Tree.
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
6- Free the Tree.
 1
Please enter the Entery # 1
 1
Please enter the Entery # 2
 2
Please enter the Entery # 3
 3
Please enter the Entery # 4
 4
Please enter the Entery # 5
 5
Please enter the Entery # 6
 6
Please enter the Entery # 7
 7
Please enter the Entery # 8
 8
Please enter the Entery # 9
 9
Please enter the Entery # 10
 10
Please enter the Entery # 11
 11
Please enter the Entery # 12
 12
Please enter the Entery # 13
 13
Please enter the Entery # 14
 14
Please enter the Entery # 15
 15
```

Welcome to DrJava. Working directory is C:\Users\Home\Work\CISC1115

```
Please enter the Entery # 16
 16
Please enter the Entery # 17
 17
Please enter the Entery # 18
 18
Please enter the Entery # 19
  19
Please enter the Entery # 20
 20
Please enter the Entery # 21
 999
Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
2- Print the Tree.
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
6- Free the Tree.
 2
Pre Order
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Post Order
20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
In Order
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
2- Print the Tree.
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
6- Free the Tree.
 4
The Tree Has Nodes = 20
Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
2- Print the Tree.
```

3- Delete Records.4- Count the Nodes.

6- Free the Tree.

5- Count the Children of each Node.

```
Node 1 Number of Children = 19
Node 2 Number of Children = 18
                                                                                            Please choose what you want to do from below (1 - 2 - 3 - 4).
Node 3 Number of Children = 17
                                                                                            1- Insert Records.
Node 4 Number of Children = 16
                                                                                            2- Print the Tree.
Node 5 Number of Children = 15
                                                                                            3- Delete Records.
Node & Number of Children = 14
                                                                                            4- Count the Nodes.
                                                                                            5- Count the Children of each Node.
Node 7 Number of Children = 13
                                                                                            6- Free the Tree.
Node 8 Number of Children = 12
Node 9 Number of Children = 11
Node 10 Number of Children = 10
                                                                                            Please enter the Entery # 1
Node 11 Number of Children = 9
                                                                                             0
Node 12 Number of Children = 8
                                                                                            Please enter the Entery # 2
Node 13 Number of Children = 7
                                                                                             999
Node 14 Number of Children = 6
Node 15 Number of Children = 5
                                                                                            Please choose what you want to do from below (1 - 2 - 3 - 4).
Node 16 Number of Children = 4
                                                                                            1- Insert Records.
Node 17 Number of Children = 3
                                                                                            2- Print the Tree.
Node 18 Number of Children = 2
                                                                                            3- Delete Records.
Node 19 Number of Children = 1
                                                                                            4- Count the Nodes.
Node 20 Number of Children = 0
                                                                                            5- Count the Children of each Node.
                                                                                            6- Free the Tree.
Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
                                                                                            Please Eneter the Vlaue to be Deleted.
2- Print the Tree.
                                                                                            ** The Value will be replaced and voided, but the Node will stay in the tree **
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
                                                                                            Please choose what you want to do from below (1 - 2 - 3 - 4).
6- Free the Tree.
                                                                                            1- Insert Records.
                                                                                            2- Print the Tree.
                                                                                            3- Delete Records.
Please enter the Entery # 1
                                                                                            4- Count the Nodes.
 21
                                                                                            5- Count the Children of each Node.
                                                                                            6- Free the Tree.
Please enter the Entery # 2
 999
                                                                                            Please Eneter the Vlaue to be Deleted.
                                                                                            ** The Value will be replaced and voided, but the Node will stay in the tree **
Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
2- Print the Tree.
                                                                                            Please choose what you want to do from below (1 - 2 - 3 - 4).
3- Delete Records.
                                                                                            1- Insert Records.
4- Count the Nodes.
                                                                                            2- Print the Tree.
5- Count the Children of each Node.
                                                                                            3- Delete Records.
                                                                                            4- Count the Nodes.
6- Free the Tree.
                                                                                            5- Count the Children of each Node.
                                                                                            6- Free the Tree.
Please Eneter the Vlaue to be Deleted.
** The Value will be replaced and voided, but the Node will stay in the tree **
```

3- Delete Records.
4- Count the Nodes.

6- Free the Tree.

6- Free the Tree.

The Tree is Free Now!

6

5- Count the Children of each Node.

```
4
Please Eneter the Vlaue to be Deleted.
                                                                            The Tree Has Nodes = 23
** The Value will be replaced and voided, but the Node will stay in the tree **
                                                                           Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                            1- Insert Records.
Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
                                                                            2- Print the Tree.
2- Print the Tree.
                                                                            3- Delete Records.
3- Delete Records.
                                                                            4- Count the Nodes.
4- Count the Nodes.
                                                                            5- Count the Children of each Node.
5- Count the Children of each Node.
6- Free the Tree.
                                                                            6- Free the Tree.
 3
                                                                             5
Please Eneter the Vlaue to be Deleted.
** The Value will be replaced and voided, but the Node will stay in the tree **
                                                                           Node 987987 Number of Children = 22
                                                                           Node 0 Number of Children = 1
                                                                           Node 10 Number of Children = 0
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                           Node 987987 Number of Children = 19
1- Insert Records.
                                                                           Node 3 Number of Children = 18
2- Print the Tree.
                                                                           Node 4 Number of Children = 17
3- Delete Records.
4- Count the Nodes.
                                                                           Node 987987 Number of Children = 16
5- Count the Children of each Node.
                                                                           Node & Number of Children = 15
6- Free the Tree.
                                                                           Node 7 Number of Children = 14
 1
                                                                           Node 8 Number of Children = 13
Please enter the Entery # 1
                                                                           Node 9 Number of Children = 12
                                                                           Node 987987 Number of Children = 11
Please enter the Entery # 2
                                                                           Node 987987 Number of Children = 10
 999
                                                                           Node 12 Number of Children = 9
                                                                           Node 13 Number of Children = 8
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                           Node 14 Number of Children = 7
1- Insert Records.
                                                                           Node 15 Number of Children = 6
2- Print the Tree.
3- Delete Records.
                                                                           Node 16 Number of Children = 5
4- Count the Nodes.
                                                                           Node 17 Number of Children = 4
5- Count the Children of each Node.
                                                                           Node 18 Number of Children = 3
6- Free the Tree.
                                                                           Node 19 Number of Children = 2
 2
                                                                            Node 20 Number of Children = 1
Pre_Order
0 10 3 4 6 7 8 9 12 13 14 15 16 17 18 19 20 21
                                                                           Node 21 Number of Children = 0
Post_Order
10 0 21 20 19 18 17 16 15 14 13 12 9 8 7 6 4 3
                                                                           Please choose what you want to do from below (1 - 2 - 3 - 4).
0 10 3 4 6 7 8 9 12 13 14 15 16 17 18 19 20 21
                                                                            1- Insert Records.
                                                                            2- Print the Tree.
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                            3- Delete Records.
                                                                            4- Count the Nodes.
2- Print the Tree.
                                                                            5- Count the Children of each Node.
```

Pre_Order

```
3 1 5
                                                                              Post Order
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                              1 5 3
1- Insert Records.
                                                                              In_Order
2- Print the Tree.
3- Delete Records.
                                                                              1 3 5
4- Count the Nodes.
5- Count the Children of each Node.
                                                                              Please choose what you want to do from below (1 - 2 - 3 - 4).
6- Free the Tree.
                                                                              1- Insert Records.
                                                                              2- Print the Tree.
The Tree Has Nodes = 0
                                                                              3- Delete Records.
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                              4- Count the Nodes.
1- Insert Records.
                                                                               5- Count the Children of each Node.
2- Print the Tree.
                                                                              6- Free the Tree.
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
                                                                              The Tree Has Nodes = 3
6- Free the Tree.
                                                                              Please choose what you want to do from below (1 - 2 - 3 - 4).
Please enter the Entery # 1
                                                                              1- Insert Records.
                                                                              2- Print the Tree.
Please enter the Entery # 2
                                                                              3- Delete Records.
                                                                              4- Count the Nodes.
Please enter the Entery # 3
                                                                              5- Count the Children of each Node.
 5
                                                                              6- Free the Tree.
Please enter the Entery # 4
                                                                              Node 3 Number of Children = 2
                                                                              Node 1 Number of Children = 0
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                              Node 5 Number of Children = 0
1- Insert Records.
2- Print the Tree.
3- Delete Records.
                                                                              Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                              1- Insert Records.
5- Count the Children of each Node.
                                                                              2- Print the Tree.
6- Free the Tree.
                                                                              3- Delete Records.
                                                                              4- Count the Nodes.
Please Eneter the Vlaue to be Deleted.
                                                                              5- Count the Children of each Node.
** The Value will be replaced and voided, but the Node will stay in the tree **
                                                                              6- Free the Tree.
                                                                                3
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                              Please Eneter the Vlaue to be Deleted.
1- Insert Records.
                                                                               ** The Value will be replaced and voided, but the Node will stay in the tree **
2- Print the Tree.
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
```

6- Free the Tree.

Please choose what you want to do from below (1 - 2 - 3 - 4).

1- Insert Records.2- Print the Tree.3- Delete Records.4- Count the Nodes.

```
5- Count the Children of each Node.
6- Free the Tree.
                                                                                            4- Count the Nodes.
                                                                                            5- Count the Children of each Node.
Please Eneter the Vlaue to be Deleted.
                                                                                            6- Free the Tree.
** The Value will be replaced and voided, but the Node will stay in the tree **
                                                                                             6
                                                                                            The Tree is Free Now!
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                                            Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
                                                                                            1- Insert Records.
                                                                                            2- Print the Tree.
2- Print the Tree.
                                                                                            3- Delete Records.
3- Delete Records.
                                                                                            4- Count the Nodes.
4- Count the Nodes.
                                                                                            5- Count the Children of each Node.
5- Count the Children of each Node.
                                                                                            δ- Free the Tree.
6- Free the Tree.
                                                                                             4
                                                                                            The Tree Has Nodes = 0
Pre_Order
                                                                                            Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                                            1- Insert Records.
Post_Order
                                                                                            2- Print the Tree.
                                                                                            3- Delete Records.
In_Order
                                                                                            4- Count the Nodes.
                                                                                            5- Count the Children of each Node.
                                                                                            6- Free the Tree.
Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
                                                                                            Please enter the Entery # 1
2- Print the Tree.
                                                                                             999
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
                                                                                            Please choose what you want to do from below (1 - 2 - 3 - 4).
6- Free the Tree.
                                                                                            1- Insert Records.
                                                                                            2- Print the Tree.
 4
                                                                                            3- Delete Records.
The Tree Has Nodes = 3
                                                                                            4- Count the Nodes.
                                                                                            5- Count the Children of each Node.
                                                                                            \delta\text{-} Free the Tree.
Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
2- Print the Tree.
                                                                                            Please Eneter the Vlaue to be Deleted.
3- Delete Records.
                                                                                            ** The Value will be replaced and voided, but the Node will stay in the tree **
4- Count the Nodes.
                                                                                             15
5- Count the Children of each Node.
6- Free the Tree.
                                                                                            Please choose what you want to do from below (1 - 2 - 3 - 4).
 5
                                                                                            1- Insert Records.
                                                                                            2- Print the Tree.
Node 987987 Number of Children = 2
                                                                                            3- Delete Records.
Node 987987 Number of Children = 0
                                                                                            4- Count the Nodes.
Node 5 Number of Children = 0
                                                                                            5- Count the Children of each Node.
                                                                                            6- Free the Tree.
Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
```

2- Print the Tree.
3- Delete Records.

Please enter the Entery # 1

```
30
                                                                                      Please Eneter the Vlaue to be Deleted.
Please enter the Entery # 2
                                                                                      ** The Value will be replaced and voided, but the Node will stay in the tree **
Please enter the Entery # 3
                                                                                      Please choose what you want to do from below (1 - 2 - 3 - 4).
 10
                                                                                     1- Insert Records.
Please enter the Entery # 4
                                                                                     2- Print the Tree.
 20
                                                                                      3- Delete Records.
                                                                                      4- Count the Nodes.
Please enter the Entery # 5
                                                                                      5- Count the Children of each Node.
                                                                                      6- Free the Tree.
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                                      Please Eneter the Vlaue to be Deleted.
1- Insert Records.
                                                                                      ** The Value will be replaced and voided, but the Node will stay in the tree **
2- Print the Tree.
                                                                                       15
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
                                                                                      Please choose what you want to do from below (1 - 2 - 3 - 4).
6- Free the Tree.
                                                                                     1- Insert Records.
 2
                                                                                     2- Print the Tree.
                                                                                     3- Delete Records.
Pre_Order
                                                                                      4- Count the Nodes.
30 5 10 20
                                                                                      5- Count the Children of each Node.
Post Order
                                                                                      6- Free the Tree.
20 10 5 30
                                                                                       3
In_Order
5 10 20 30
                                                                                      Please Eneter the Vlaue to be Deleted.
                                                                                      ** The Value will be replaced and voided, but the Node will stay in the tree **
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                                       30
1- Insert Records.
2- Print the Tree.
                                                                                      Please choose what you want to do from below (1 - 2 - 3 - 4).
3- Delete Records.
                                                                                      1- Insert Records.
4- Count the Nodes.
                                                                                      2- Print the Tree.
5- Count the Children of each Node.
6- Free the Tree.
                                                                                      3- Delete Records.
                                                                                      4- Count the Nodes.
                                                                                      5- Count the Children of each Node.
Please Eneter the Vlaue to be Deleted.
                                                                                      6- Free the Tree.
** The Value will be replaced and voided, but the Node will stay in the tree **
                                                                                       2
 20
                                                                                      Pre_Order
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                                      Post Order
1- Insert Records.
2- Print the Tree.
                                                                                      In_Order
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
                                                                                      Please choose what you want to do from below (1 - 2 - 3 - 4).
6- Free the Tree.
                                                                                      1- Insert Records.
```

```
2- Print the Tree.
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
6- Free the Tree.
                                                                           1- Insert Records.
                                                                           2- Print the Tree.
                                                                           3- Delete Records.
The Tree Has Nodes = 4
                                                                           4- Count the Nodes.
                                                                           5- Count the Children of each Node.
                                                                           6- Free the Tree.
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                            2
1- Insert Records.
                                                                           Pre_Order
2- Print the Tree.
3- Delete Records.
                                                                           Post Order
4- Count the Nodes.
                                                                           In_Order
5- Count the Children of each Node.
6- Free the Tree.
                                                                           Please choose what you want to do from below (1 - 2 - 3 - 4).
 5
                                                                           1- Insert Records.
Node 987987 Number of Children = 3
                                                                           2- Print the Tree.
Node 987987 Number of Children = 2
                                                                           3- Delete Records.
                                                                           4- Count the Nodes.
Node 987987 Number of Children = 1
                                                                           5- Count the Children of each Node.
Node 987987 Number of Children = 0
                                                                           6- Free the Tree.
                                                                            4
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                           The Tree Has Nodes = 1
1- Insert Records.
                                                                           Please choose what you want to do from below (1 - 2 - 3 - 4).
2- Print the Tree.
                                                                           1- Insert Records.
3- Delete Records.
                                                                           2- Print the Tree.
4- Count the Nodes.
                                                                           3- Delete Records.
5- Count the Children of each Node.
                                                                           4- Count the Nodes.
                                                                           5- Count the Children of each Node.
6- Free the Tree.
                                                                           6- Free the Tree.
  6
The Tree is Free Now!
                                                                           Node 2 Number of Children = 0
                                                                           Please choose what you want to do from below (1 - 2 - 3 - 4).
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                           1- Insert Records.
1- Insert Records.
                                                                           2- Print the Tree.
2- Print the Tree.
                                                                           3- Delete Records.
                                                                           4- Count the Nodes.
3- Delete Records.
                                                                           5- Count the Children of each Node.
4- Count the Nodes.
                                                                           6- Free the Tree.
5- Count the Children of each Node.
                                                                            3
6- Free the Tree.
                                                                           Please Eneter the Vlaue to be Deleted.
                                                                           ** The Value will be replaced and voided, but the Node will stay in the tree **
Please enter the Entery # 1
  2
                                                                           Please choose what you want to do from below (1 - 2 - 3 - 4).
Please enter the Entery # 2
```

999

1- Insert Records.

Please choose what you want to do from below (1 - 2 - 3 - 4).

```
1- Insert Records.
2- Print the Tree.
                                                                    4- Count the Nodes.
                                                                    5- Count the Children of each Node.
3- Delete Records.
                                                                    6- Free the Tree.
4- Count the Nodes.
5- Count the Children of each Node.
6- Free the Tree.
                                                                    Please enter the Entery # 1
 2
Pre_Order
                                                                    Please enter the Entery # 2
                                                                      25
Post_Order
                                                                    Please enter the Entery # 3
                                                                      75
In Order
                                                                    Please enter the Entery # 4
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                    Please enter the Entery # 5
1- Insert Records.
                                                                      37
2- Print the Tree.
3- Delete Records.
                                                                    Please enter the Entery # 6
4- Count the Nodes.
                                                                      60
5- Count the Children of each Node.
                                                                    Please enter the Entery # 7
6- Free the Tree.
                                                                      90
  4
                                                                    Please enter the Entery # 8
The Tree Has Nodes = 1
                                                                      8
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                    Please enter the Entery # 9
1- Insert Records.
                                                                      15
2- Print the Tree.
                                                                    Please enter the Entery # 10
3- Delete Records.
                                                                      32
4- Count the Nodes.
5- Count the Children of each Node.
                                                                    Please enter the Entery # 11
6- Free the Tree.
                                                                      45
 5
                                                                    Please enter the Entery # 12
Node 987987 Number of Children = 0
                                                                      50
                                                                    Please enter the Entery # 13
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                      67
1- Insert Records.
2- Print the Tree.
                                                                    Please enter the Entery # 14
3- Delete Records.
                                                                      97
4- Count the Nodes.
                                                                    Please enter the Entery # 15
5- Count the Children of each Node.
                                                                      95
6- Free the Tree.
                                                                    Please enter the Entery # 16
 6
                                                                      999
The Tree is Free Now!
                                                                    Please choose what you want to do from below (1 - 2 - 3 - 4).
Please choose what you want to do from below (1 - 2 - 3 - 4).
```

1- Insert Records.

2- Print the Tree.
3- Delete Records.

1- Insert Records.

2- Print the Tree.

```
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
                                                                     3- Delete Records.
6- Free the Tree.
                                                                     4- Count the Nodes.
 2
                                                                     5- Count the Children of each Node.
                                                                     6- Free the Tree.
Pre Order
11 8 25 12 15 75 37 32 60 45 50 67 90 97 95
                                                                      3
Post Order
                                                                     Please Eneter the Vlaue to be Deleted.
8 15 12 32 50 45 67 60 37 95 97 90 75 25 11
                                                                     ** The Value will be replaced and voided, but the Node will stay in the tree **
In Order
8 11 12 15 25 32 37 45 50 60 67 75 90 95 97
                                                                     Please choose what you want to do from below (1 - 2 - 3 - 4).
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                     1- Insert Records.
1- Insert Records.
                                                                     2- Print the Tree.
2- Print the Tree.
                                                                     3- Delete Records.
3- Delete Records.
                                                                     4- Count the Nodes.
                                                                     5- Count the Children of each Node.
4- Count the Nodes.
                                                                     6- Free the Tree.
5- Count the Children of each Node.
                                                                       3
6- Free the Tree.
                                                                     Please Eneter the Vlaue to be Deleted.
                                                                     ** The Value will be replaced and voided, but the Node will stay in the tree **
The Tree Has Nodes = 15
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                     Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
                                                                     1- Insert Records.
2- Print the Tree.
                                                                     2- Print the Tree.
3- Delete Records.
                                                                     3- Delete Records.
4- Count the Nodes.
                                                                     4- Count the Nodes.
5- Count the Children of each Node.
                                                                     5- Count the Children of each Node.
                                                                     6- Free the Tree.
6- Free the Tree.
 5
                                                                     Please enter the Entery # 1
Node 11 Number of Children = 14
                                                                       40
Node 8 Number of Children = 0
                                                                     Please enter the Entery # 2
Node 25 Number of Children = 12
Node 12 Number of Children = 1
                                                                       99
Node 15 Number of Children = 0
                                                                     Please enter the Entery # 3
Node 75 Number of Children = 9
Node 37 Number of Children = 5
Node 32 Number of Children = 0
                                                                     Please choose what you want to do from below (1 - 2 - 3 - 4).
Node 60 Number of Children = 3
                                                                     1- Insert Records.
Node 45 Number of Children = 1
                                                                     2- Print the Tree.
Node 50 Number of Children = 0
                                                                     3- Delete Records.
Node 67 Number of Children = 0
                                                                     4- Count the Nodes.
Node 90 Number of Children = 2
                                                                     5- Count the Children of each Node.
                                                                     6- Free the Tree.
Node 97 Number of Children = 1
Node 95 Number of Children = 0
                                                                       2
                                                                     Pre Order
Please choose what you want to do from below (1 - 2 - 3 - 4).
```

1- Insert Records.
2- Print the Tree.

```
11 8 25 12 75 32 40 60 45 50 67 90 97 95 99
Post Order
8 12 40 32 50 45 67 60 95 99 97 90 75 25 11
                                                                  The Tree is Free Now!
In Order
8 11 12 25 32 40 45 50 60 67 75 90 95 97 99
                                                                  Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                  1- Insert Records.
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                  2- Print the Tree.
1- Insert Records.
                                                                  3- Delete Records.
2- Print the Tree.
                                                                  4- Count the Nodes.
3- Delete Records.
                                                                  5- Count the Children of each Node.
4- Count the Nodes.
                                                                  6- Free the Tree.
5- Count the Children of each Node.
                                                                   1
6- Free the Tree.
                                                                  Please enter the Entery # 1
 4
                                                                    50
The Tree Has Nodes = 17
                                                                  Please enter the Entery # 2
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                    40
1- Insert Records.
                                                                  Please enter the Entery # 3
2- Print the Tree.
                                                                    60
3- Delete Records.
4- Count the Nodes.
                                                                  Please enter the Entery # 4
5- Count the Children of each Node.
                                                                    30
6- Free the Tree.
                                                                  Please enter the Entery # 5
 5
                                                                    70
Node 11 Number of Children = 16
                                                                  Please enter the Entery # 6
Node 8 Number of Children = 0
Node 25 Number of Children = 14
                                                                    20
Node 12 Number of Children = 1
                                                                  Please enter the Entery # 7
Node 987987 Number of Children = 0
                                                                    80
Node 75 Number of Children = 11
Node 987987 Number of Children = 6
                                                                  Please enter the Entery # 8
Node 32 Number of Children = 1
                                                                    10
Node 40 Number of Children = 0
Node 60 Number of Children = 3
                                                                  Please enter the Entery # 9
Node 45 Number of Children = 1
                                                                    90
Node 50 Number of Children = 0
                                                                  Please enter the Entery # 10
Node 67 Number of Children = 0
                                                                    999
Node 90 Number of Children = 3
Node 97 Number of Children = 2
Node 95 Number of Children = 0
                                                                  Please choose what you want to do from below (1 - 2 - 3 - 4).
Node 99 Number of Children = 0
                                                                  1- Insert Records.
                                                                  2- Print the Tree.
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                  3- Delete Records.
1- Insert Records.
                                                                  4- Count the Nodes.
2- Print the Tree.
                                                                  5- Count the Children of each Node.
3- Delete Records.
                                                                  6- Free the Tree.
4- Count the Nodes.
                                                                    2
5- Count the Children of each Node.
6- Free the Tree.
                                                                  Pre_Order
```

50 40 30 20 10 60 70 80 90

```
6- Free the Tree.
                                                                     4
Post_Order
10 20 30 40 90 80 70 60 50
                                                                   The Tree Has Nodes = 0
In Order
10 20 30 40 50 60 70 80 90
                                                                   Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                   1- Insert Records.
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                   2- Print the Tree.
1- Insert Records.
                                                                   3- Delete Records.
2- Print the Tree.
                                                                   4- Count the Nodes.
3- Delete Records.
                                                                   5- Count the Children of each Node.
4- Count the Nodes.
                                                                   6- Free the Tree.
5- Count the Children of each Node.
6- Free the Tree.
                                                                     1
 4
                                                                   Please enter the Entery # 1
The Tree Has Nodes = 9
                                                                    30
                                                                   Please enter the Entery # 2
Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
                                                                     40
2- Print the Tree.
                                                                   Please enter the Entery # 3
3- Delete Records.
                                                                     20
4- Count the Nodes.
5- Count the Children of each Node.
                                                                   Please enter the Entery # 4
6- Free the Tree.
                                                                     10
 5
                                                                   Please enter the Entery # 5
Node 50 Number of Children = 8
                                                                    50
Node 40 Number of Children = 3
Node 30 Number of Children = 2
                                                                   Please enter the Entery # 6
Node 20 Number of Children = 1
                                                                     999
Node 10 Number of Children = 0
Node 60 Number of Children = 3
Node 70 Number of Children = 2
                                                                   Please choose what you want to do from below (1 - 2 - 3 - 4).
Node 80 Number of Children = 1
                                                                   1- Insert Records.
Node 90 Number of Children = 0
                                                                   2- Print the Tree.
                                                                   3- Delete Records.
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                   4- Count the Nodes.
1- Insert Records.
                                                                   5- Count the Children of each Node.
2- Print the Tree.
                                                                   6- Free the Tree.
3- Delete Records.
4- Count the Nodes.
                                                                    2
5- Count the Children of each Node.
                                                                   Pre_Order
6- Free the Tree.
                                                                   30 20 10 40 50
 6
                                                                   Post Order
The Tree is Free Now!
                                                                   10 20 50 40 30
                                                                   In Order
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                   10 20 30 40 50
1- Insert Records.
2- Print the Tree.
                                                                   Please choose what you want to do from below (1 - 2 - 3 - 4).
3- Delete Records.
                                                                   1- Insert Records.
4- Count the Nodes.
                                                                   2- Print the Tree.
5- Count the Children of each Node.
                                                                   3- Delete Records.
                                                                   4- Count the Nodes.
```

```
5- Count the Children of each Node.
6- Free the Tree.
The Tree Has Nodes = 5
Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
2- Print the Tree.
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
6- Free the Tree.
 5
Node 30 Number of Children = 4
Node 20 Number of Children = 1
Node 10 Number of Children = 0
Node 40 Number of Children = 1
Node 50 Number of Children = 0
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                    4
1- Insert Records.
2- Print the Tree.
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
6- Free the Tree.
 6
The Tree is Free Now!
Please choose what you want to do from below (1 - 2 - 3 - 4).
                                                                   000
1- Insert Records.
2- Print the Tree.
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
6- Free the Tree.
 2
Pre_Order
Post_Order
In_Order
Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
2- Print the Tree.
3- Delete Records.
```

```
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
6- Free the Tree.

4

The Tree Has Nodes = 0

Please choose what you want to do from below (1 - 2 - 3 - 4).
1- Insert Records.
2- Print the Tree.
3- Delete Records.
4- Count the Nodes.
5- Count the Children of each Node.
6- Free the Tree.

000
```