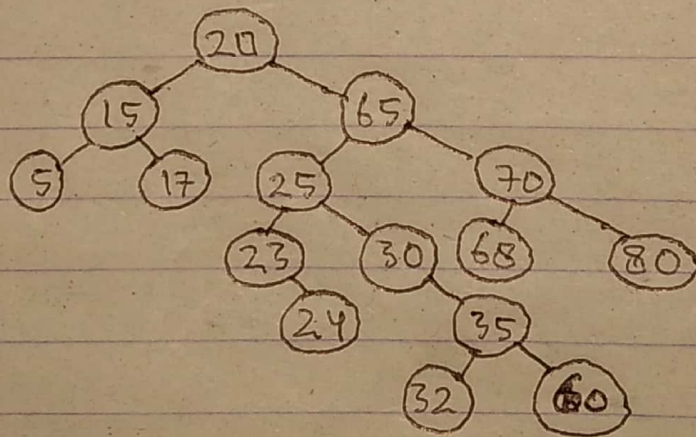Nama: Faiz Hidayat

NIM : 201420026

Kelas : 1F2A

1. Insert data-data berikut, sehingga muncul sebuah Tree:

   20, 65, 25, 30, 70, 80, 15, 17, 35, 60, 5, 23, 32, 24, 68

   - Tentukan simpul, edge, root, leaf, level & height
   - Jika dilakukan traversal pohon, berapakah nataeinya untuk traversal preorder, inorder dan postorder?

Jawab

Simpul = 15

Edge = 14

Leaf = 5 17 32 60 68 80

level 0 = 20

       1 = 15 65

$$2 = 5 \quad 17 \quad 25 \quad 70$$
$$3 = 23 \quad 30 \quad 68 \quad 80$$
$$4 = 24 \quad 35$$
$$5 = 32 \quad 60$$

Height $= 5 + 1 = 6$

Preorder $= 20, 15, 5, 17, 65, 25, 23, 24, 30, 35,$
$\qquad$ $32, 60, 70, 68, 80$

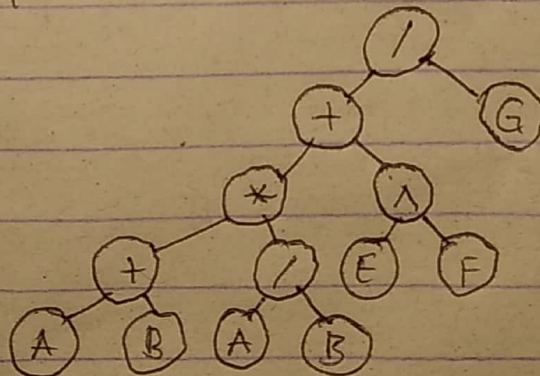Inorder $= 5, 15, 17, 20, 24, 23, 32, 35, 60, 30,$
$\qquad$ $25, 68, 70, 80, 65$

Postorder $= 5, 17, 15, 24, 23, 32, 60, 35, 30, 25,$
$\qquad$ $68, 80, 70, 65, 20$

2. Dari pohon berikut tentukan
1.) Preorder
2.) Inorder
3.) Postorder

Jawab

1.) Preorder

$$= / + * + A B / A B \wedge E F G$$

2. Inorder

$$= A + B * A / B + E \wedge F / G$$

3. Postorder

$$= A B + A B / * E F \wedge + G /$$