



LEMBAR JAWAB

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Mata Kuliah : ALGORITMA & STRUKTUR DATA

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Waktu : 60 MENIT

Prodi/Semester : D4 TEKNIK INFORMATIKA /2

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Kelompok : 2A

Tanda Tangan :

① $a[] = 10 \ 56 \ 78 \ 2 \ 53 \ 78 \ 82 \ 0 \ 9$
 $n = 9$

Quick

$a = \overset{0}{10} \ \overset{1}{56} \ \overset{2}{78} \ \overset{3}{2} \ \overset{4}{53} \ \overset{5}{78} \ \overset{6}{82} \ \overset{7}{0} \ \overset{8}{9}$

Start = 0

end = $9 - 1 = 8$

int $p = \text{partition}(a, 0, 8);$

Partition

$a = \overset{0}{10} \ \overset{1}{56} \ \overset{2}{78} \ \overset{3}{2} \ \overset{4}{53} \ \overset{5}{78} \ \overset{6}{82} \ \overset{7}{0} \ \overset{8}{9}$

pivot = $a[8] = 9$

$i = 0 - 1 = -1$

for ($J = 0; J \leq 8$)

$J = 0$

if ($a[0] < \text{pivot}$)

$10 < 9 ?$ (X)

$J = 1$

if ($a[1] < 9$)

$56 < 9$ (X)

$J = 2$

if ($a[2] < 9$)

$78 < 9$ (X)

$J = 3$

if ($a[3] < 9$)

$2 < 9$

$i = i + 1$

$i = -1 + 1 = 0;$

$t = a[0]; \rightarrow t = 10$

$a[0] = a[3] \rightarrow a[0] = 2;$

$a[3] = 10;$

$\overset{0}{2} \ \overset{1}{56} \ \overset{2}{78} \ \overset{3}{10} \ \overset{4}{53} \ \overset{5}{78} \ \overset{6}{82} \ \overset{7}{0} \ \overset{8}{9}$

$J = 4$

if ($a[4] < 9$)

$53 < 9$ (X)

$J = 5$

if ($a[5] < 9$)

$78 < 9$ (X)

$J = 6$

if ($a[6] < 9$)

$82 < 9$ (X)

$J = 7$

if ($a[7] < 9$)

$0 < 9$

$i = i + 1$

$i = 0 + 1 = 1;$

$t = a[1]; \rightarrow t = 56$

$a[1] = a[7] \rightarrow a[1] = 0;$

$a[7] = 56;$

$\overset{0}{2} \ \overset{1}{0} \ \overset{2}{78} \ \overset{3}{10} \ \overset{4}{53} \ \overset{5}{78} \ \overset{6}{82} \ \overset{7}{56} \ \overset{8}{9}$

$J = 8$

if ($a[8] < 9$)

$9 < 9$ (X)

```

int t = a[i+1] → t = a[1+1];
      t = a[2];
      t = 78;
a[i+1] = a[end] → a[2] = a[8]
      a[2] = 9;

```

```

a[end] = t → a[8] = 78;

```

```

return(i+1) → return 2;

```

```

a = 02 10 29 310 453 578 682 756 878

```

```

p = 2

```

```

int p = 2; (from return);

```

```

quick(a, start, p-1);

```

```

quick(a, 0, 1);

```

```

int p = partition(a, 0, 1);

```

Partition

```

pivot = a[end]

```

```

pivot = a[1]

```

```

pivot = 0

```

```

i = (0-1) → i = -1;

```

```

for (j = 0 : j <= 1)

```

```

j = 0

```

```

if (a[0] < 0)

```

```

    2 < 0 (X)

```

```

j = 1

```

```

if (a[1] < 0)

```

```

    0 < 0 (X)

```

```

int t = a[i+1] → t = a[-1+1]

```

```

      t = a[0]

```

```

      t = 2;

```

```

a[i+1] = a[end]

```

```

a[0] = a[1] → a[0] = 0;

```

```

a[end] = t → a[1] = 2;

```

```

return(i+1) → return 0;

```

```

a = 00 12 29 310 453 578 682 756 878

```

```

p = 0

```

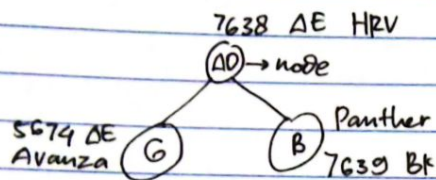


```

② public class ArrayList {
    public static class mobil {
        private String MerkMobil;
        private String Plat;
        public mobil () {
        }
        public mobil (String merk, String plat) {
            this.MerkMobil = merk;
            this.Plat = plat;
        }
        public String get. MerkMobil () {return this.MerkMobil;
        }
        public void set MerkMobil (String MerkMobil) {this.MerkMobil = MerkMobil;
        }
    }
}

```

•> Menentukan pohon biner



Ket :

Left : lebih kecil

Right : lebih besar

•> Lihat Input nodenya

Node left, right : itu tandanya angka lebih kecil dari nodenya.

Setelah itu kita mencari kekanan dengan nilai yang lebih besar.

Misalnya nodenya 7638 AE. HRV lalu geser ke kiri dengan nilai 5674 AE nilainya lebih kecil avanza. Setelah itu geser ke kanan.