

keylist = { 4, 1, 3, 2, 6 };

main : merge_sort (keylist, 0, 4)

mid = 2

if (4 > 0)

• mergesort (a, 0, 2)

mid = 1

if (2 > 0)

• mergesort (a, 0, 1)

mid = 0

if (1 > 0)

~~• mergesort (a, 0, 0)~~

~~mid = 0~~

~~if (0 > 0) return~~

~~• mergesort (a, 1, 1)~~

~~mid = 1~~

~~if (1 > 1) return~~

• merge (a, 0, 0, 1)

for (pl = 1; 1 > 0)

b[0] = 4

pl = 0; 0 > 0

for (pr = 0; 0 < 1)

b[1] = 1

pr = 1; 1 < 1

for (k = 0; 0 ≤ 1)

if (1 < 4)

a[0] = 1

pr = 0

k = 1; 1 ≤ 1

if (4 < 4) else

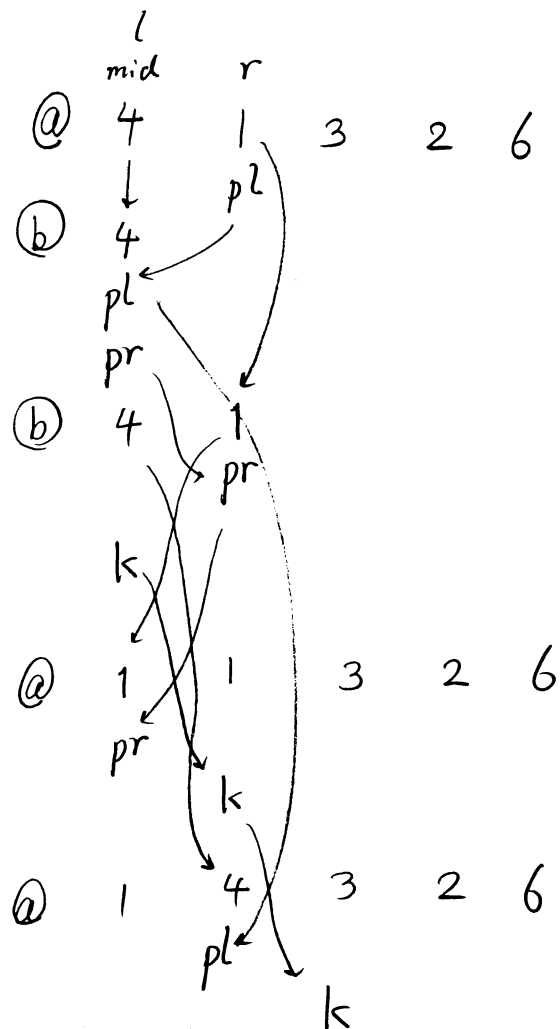
a[1] = 4

pl = +1

k = 2; 2 ≤ 1

return.

return



• merge sort (a, 2, 2)

mid = 2

~~if (2 > 2) return~~

• merge (a, 0, 1, 2)

for (pl = 2; 2 > 0)

b[1] = 4

pl = 1 (> 0)

b[0] = 1

~~pl = 0 (> 0)~~

for (pr = 1 (< 2))

b[2] = 3

~~pr = 2 (< 2)~~

for (k = 0 (≤ 2))

if (3 < 1) else

a[0] = 1

pl = 1

k = 1 (≤ 2)

if (3 < 4)

a[1] = 3

pr = 1

k = 2 (≤ 2)

if (4 < 4) else

a[2] = 4

pl = 2

~~k = 3 (≤ 2)~~

return

return

• mergesort (a, 3, 4)

mid = 3

if (3 < 4)

~~• mergesort (a, 3, 3)~~

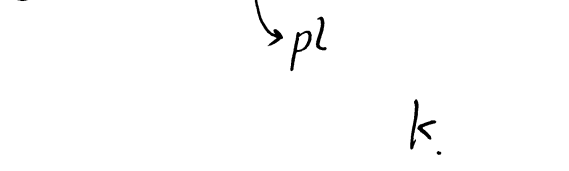
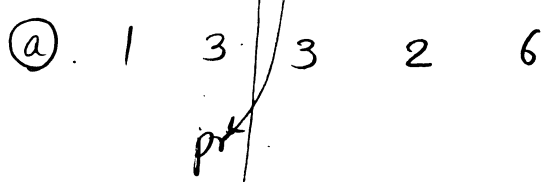
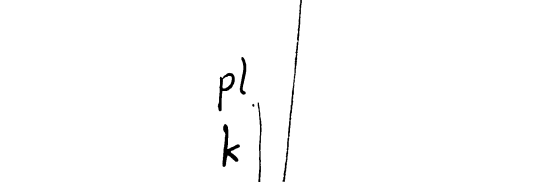
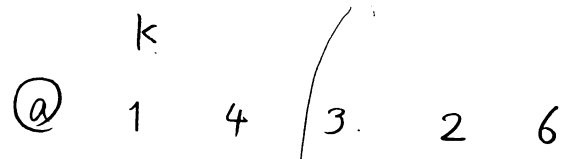
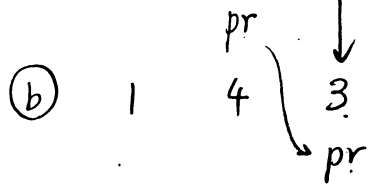
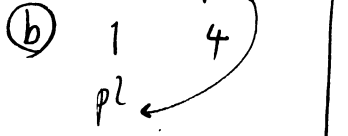
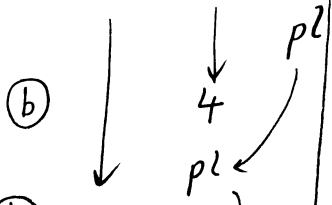
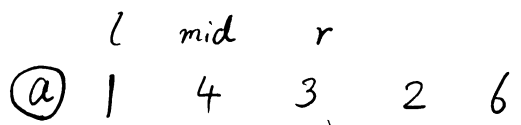
~~mid = 3~~

~~if (3 < 3) return~~

• mergesort (a, 4, 4)

mid = 4

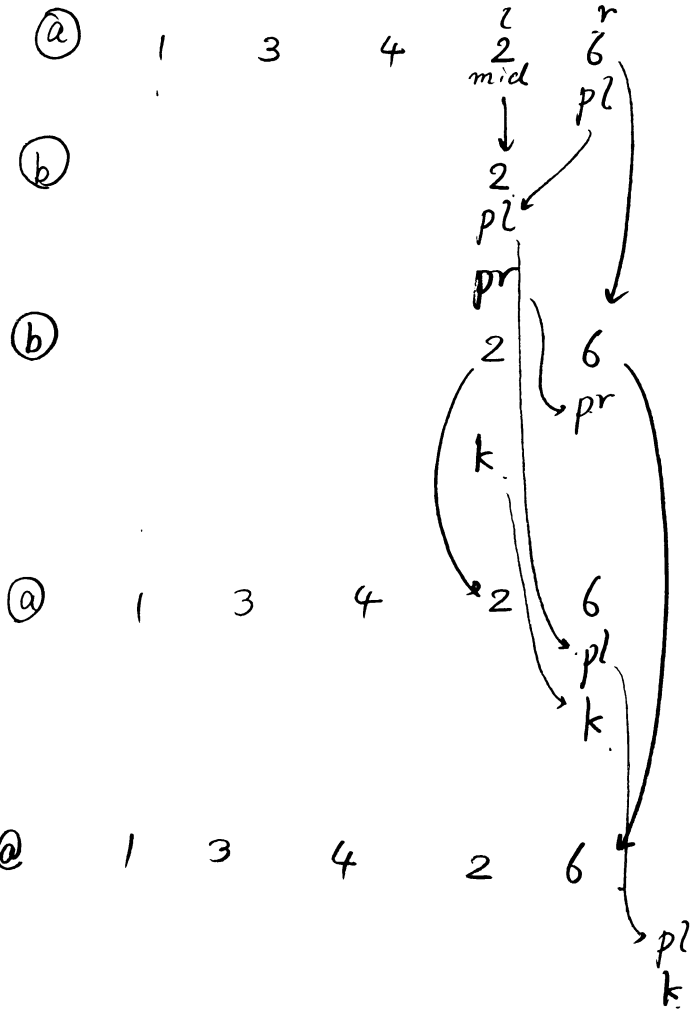
if (4 < 4) return



```

merge(a, 3, 3, 4)
for (pl = 4 (> 3))
    b[3] = 2
    pl = 3 (> 3)
for (pr = 3 (< 4))
    b[4] = 6
    pr = 4 (< 4)
for (k = 3 (≦ 4))
    if (6 < 2) else
        a[3] = 2
        pl = 4
        k = 4 (≦ 4)
        if (6 < 6) else
            p[4] = 6
            pl = 5
            k = 5 (≦ 4)
return

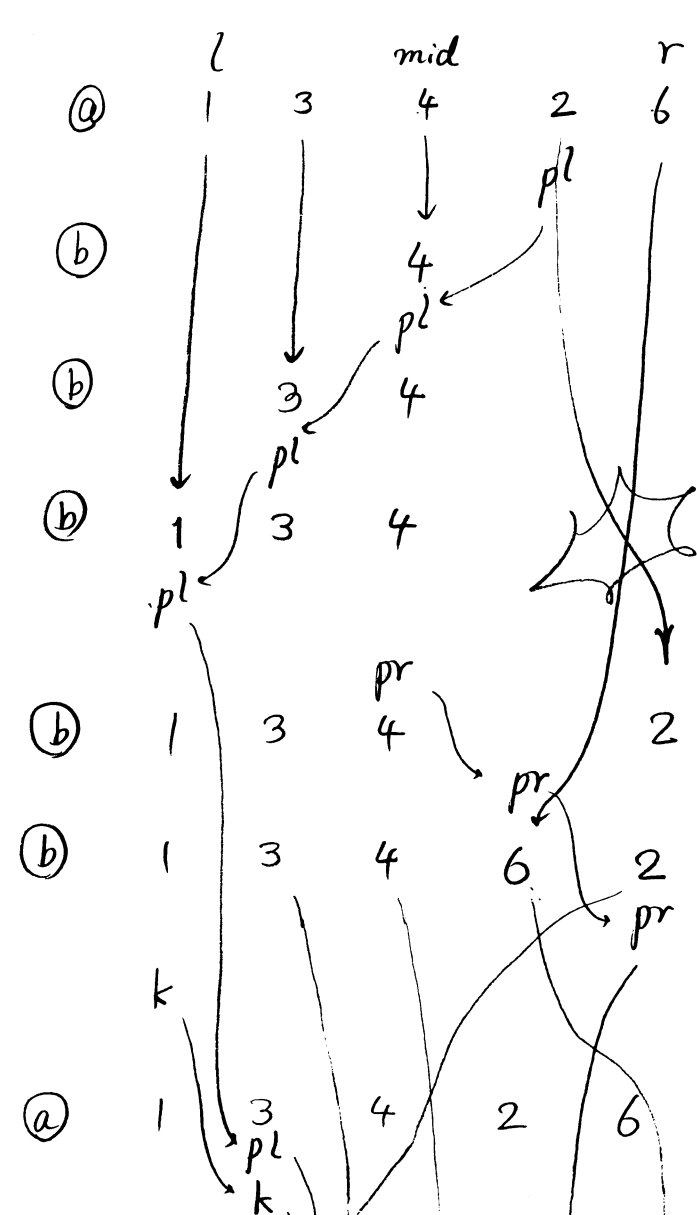
```



```

return
merge(a, 0, 2, 4)
for (pl = 3 (> 0))
    b[2] = 4
    pl = 2 (> 0)
    b[1] = 3
    pl = 1 (> 0)
    b[0] = 1
    pl = 0 (> 0)
for (pr = 2 (< 4))
    b[4] = 2
    pr = 3 (< 4)
    b[3] = 6
    pr = 4 (< 4)
for (k = 0 (≦ 4))
    if (2 < 1) else
        a[0] = 1
        pl = 1
        k = 1 (≦ 4)

```



if(2 < 3)

a[1] = 2

pr = 3

k = 2 (≤ 4)

if(6 < 3) else

a[2] = 3

pl = 2

k = 3 (≤ 4)

if(6 < 4) else

a[3] = 4

pl = 3

k = 4 (≤ 4)

if(6 < 6) else

a[4] = 6

pl = 4

k = 5 (~~≤ 4~~)

return

return

main
printf
return,

(a)

