

```
def QuickSort(arr, iterasi=1, sisi=''):
    if len(arr)<2:
        return arr
    else:
        Pipot = arr[-1]
        P,L,R = [],[],[]
        for i in arr:
            if i < Pipot:
                L.append(i)
            else:
                if i > Pipot:
                    R.append(i)
                elif i == Pipot:
                    P.append(i)
        print(f'pemotongan ke: {iterasi} || sisi: {sisi}')
        print(L, P, R)
        print('')
        return QuickSort(L, iterasi+1, sisi+'kiri ') + P + QuickSort(R, iterasi+1, sisi+'kanan ')
```

```
QuickSort([41,2,5,6,5,3,6,4,3,3,5,7,9,5,3,2,3,6,8,9,8,6,43,20,12])
```

```

pemotongan ke: 1 || sisi:
[2, 5, 6, 5, 3, 6, 4, 3, 3, 5, 7, 9, 5, 3, 2, 3, 6, 8, 9, 8, 6] [12] [41, 43, 20]

pemotongan ke: 2 || sisi: kiri
[2, 5, 5, 3, 4, 3, 3, 5, 5, 3, 2, 3] [6, 6, 6, 6] [7, 9, 8, 9, 8]

pemotongan ke: 3 || sisi: kiri kiri
[2, 2] [3, 3, 3, 3, 3] [5, 5, 4, 5, 5]

pemotongan ke: 4 || sisi: kiri kiri kiri
[] [2, 2] []

pemotongan ke: 4 || sisi: kiri kiri kanan
[4] [5, 5, 5, 5] []

pemotongan ke: 3 || sisi: kiri kanan
[7] [8, 8] [9, 9]

pemotongan ke: 4 || sisi: kiri kanan kanan
[] [9, 9] []

pemotongan ke: 2 || sisi: kanan
[] [20] [41, 43]

pemotongan ke: 3 || sisi: kanan kanan
[41] [43] []

[2, 2, 3, 3, 3, 3, 3, 4, 5, 5, 5, 5, 6, 6, 6, 6, 7, 8, 8, 9, 9, 12, 20, 41, 43]
```

Start coding or [generate](#) with AI.