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Kelas : 2B

Mata Kuliah : Algoritma Struktur Data 2

Jawaban UAS NO 2

Quick sort

```
public class QuickSort {  
    private int[] data;  
    public void setData (int[] data) { this.data = data; }  
    private int partition (int start, int end)  
    {  
        int pivot = this.data [end];  
        int i = (start - 1);  
        for (int j = start; j <= end - 1; j++)  
        {  
            if (this.data [j] < pivot)  
            {  
                j++;  
                int t = this.data [j];  
                this.data [j] = this.data [i];  
                this.data [i] = t;  
            }  
        }  
        int t = this.data [i + 1];  
        this.data [i + 1] = this.data [end];  
        this.data [end] = t;  
        return (i + 1);  
    }  
    public void quickSort (int start, int end)  
    {  
        if (start < end)  
        {  
            int p = partition (start, end);  
            quickSort (start, p - 1);  
            quickSort (p + 1, end);  
        }  
    }  
}
```

```
public void printArr (int n)
```

3

inf. 3;

for ($i = 0; i < n; i++$)

```
System.out.print(this.data[i] + " ");
```

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```
public static void main (String [] args) {
```

```
int [] data array = { 90, 72, 65, 100, 63, 72 };
```

```
int n = dataArray.length;
```

System.out.println (" ")

Before sorting array elements are -15
" " ");

```
Quick Sort - my QS = new Quick Sort();
```

```
-myQ5.setData (data Array) ;
```

myQ5 . Print Arr (n) ;

```

myQS.quickSort(0, n-1);

```

```
System.out.println("\n After Sorting array elements are - ");
```

-myQS .PrintArr (n) ;

```
System.out.println();
```

2

3