



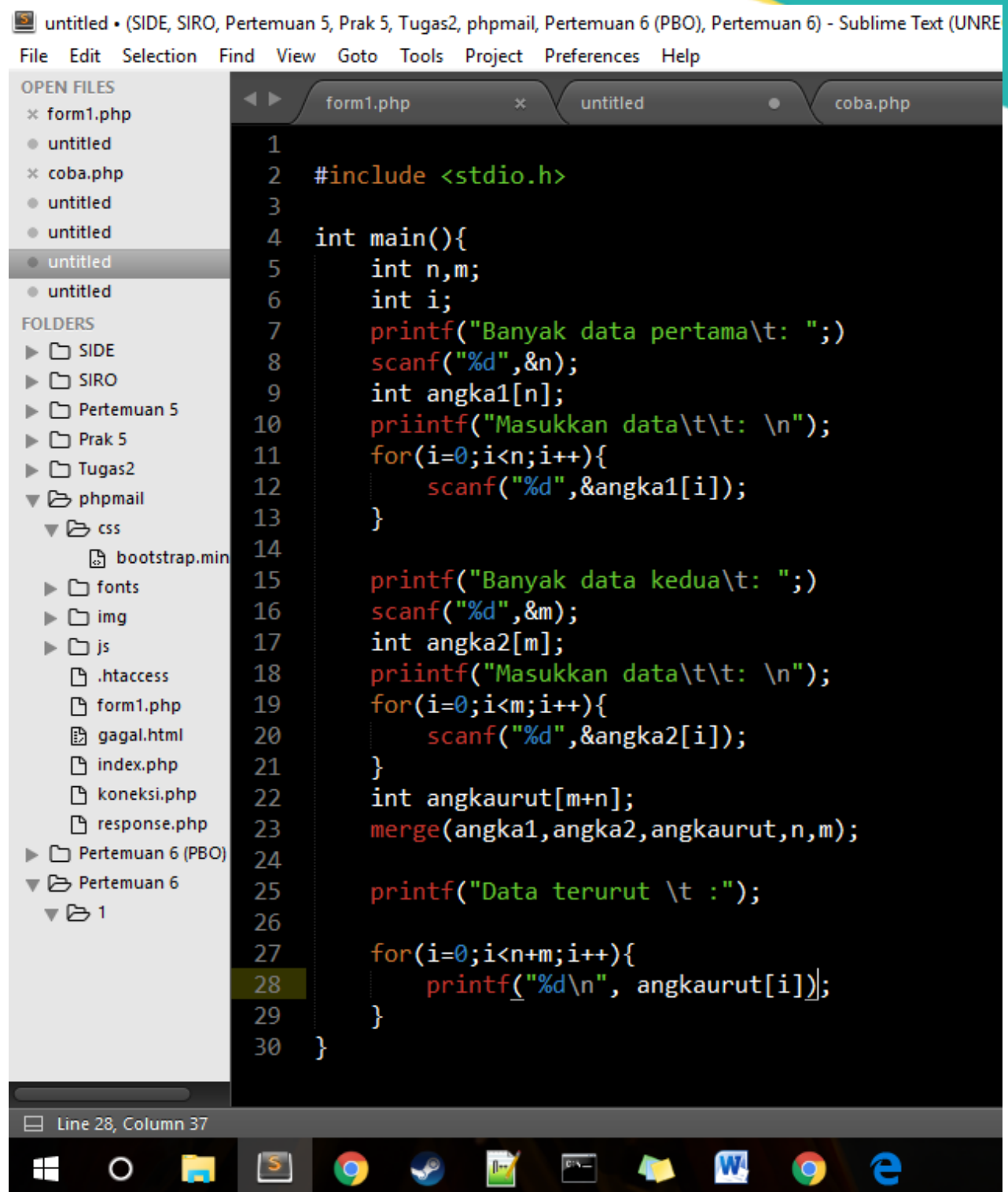
MODUL **ALPRO 2**

 Merge Table
Tim Asisten Pemrograman Angkatan

Modul ALPRO 2

Menggabungkan dua tabel

main.c



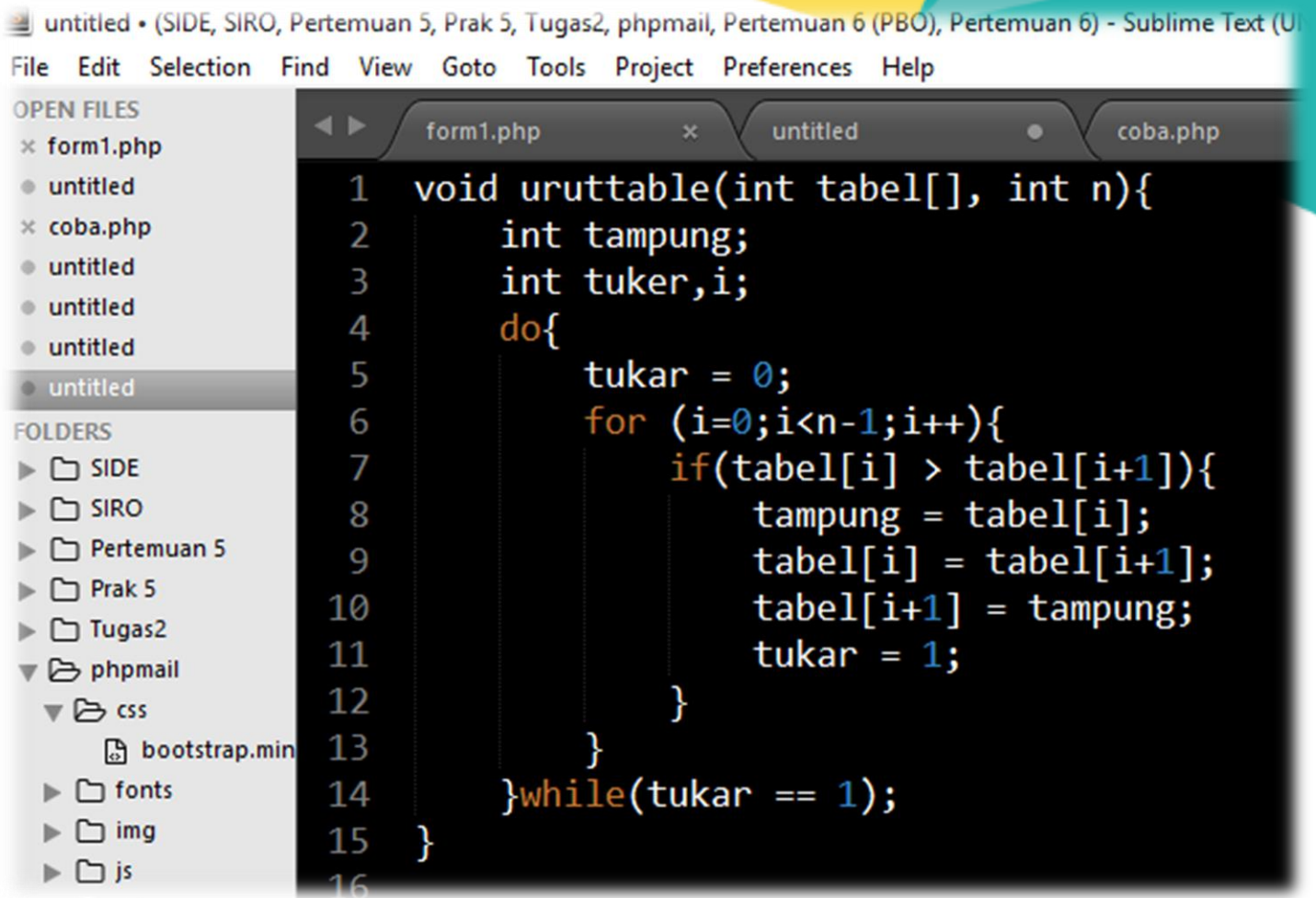
The screenshot shows a Sublime Text editor window with the title bar "untitled • (SIDE, SIRO, Pertemuan 5, Prak 5, Tugas2, phpmail, Pertemuan 6 (PBO), Pertemuan 6) - Sublime Text (UNRE". The menu bar includes File, Edit, Selection, Find, View, Goto, Tools, Project, Preferences, and Help. The left sidebar displays the "OPEN FILES" list with "form1.php" and several "untitled" files, and the "FOLDERS" list with directories like SIDE, SIRO, Pertemuan 5, Prak 5, Tugas2, phpmail, and subdirectories like css, fonts, img, js, and files like .htaccess, form1.php, gagal.html, index.php, koneksi.php, response.php, and folders like Pertemuan 6 (PBO), Pertemuan 6, and 1. The main editor area shows a C program with line numbers 1 to 30. The code includes `<stdio.h>`, defines `main()` with variables `n`, `m`, and `i`, prints "Banyak data pertama\t: ", scans `n`, declares `angka1[n]`, prints "Masukkan data\t\t: \n", and loops to scan `angka1[i]`. It then prints "Banyak data kedua\t: ", scans `m`, declares `angka2[m]`, prints "Masukkan data\t\t: \n", and loops to scan `angka2[i]`. It declares `angkaurut[m+n]`, calls `merge(angka1, angka2, angkaurut, n, m)`, prints "Data terurut \t :)", and loops to print `angkaurut[i]`. The status bar at the bottom shows "Line 28, Column 37". The Windows taskbar at the very bottom contains icons for Windows, a circle, a folder, a calculator, a globe, a notepad, a terminal, a folder, Word, Chrome, and Edge.

```
1
2 #include <stdio.h>
3
4 int main(){
5     int n,m;
6     int i;
7     printf("Banyak data pertama\t: ");
8     scanf("%d",&n);
9     int angka1[n];
10    printf("Masukkan data\t\t: \n");
11    for(i=0;i<n;i++){
12        scanf("%d",&angka1[i]);
13    }
14
15    printf("Banyak data kedua\t: ");
16    scanf("%d",&m);
17    int angka2[m];
18    printf("Masukkan data\t\t: \n");
19    for(i=0;i<m;i++){
20        scanf("%d",&angka2[i]);
21    }
22    int angkaurut[m+n];
23    merge(angka1, angka2, angkaurut, n, m);
24
25    printf("Data terurut \t :");
26
27    for(i=0;i<n+m;i++){
28        printf("%d\n", angkaurut[i]);
29    }
30 }
```

Modul ALPRO 2

mesin.c

- Table Sorting procedure

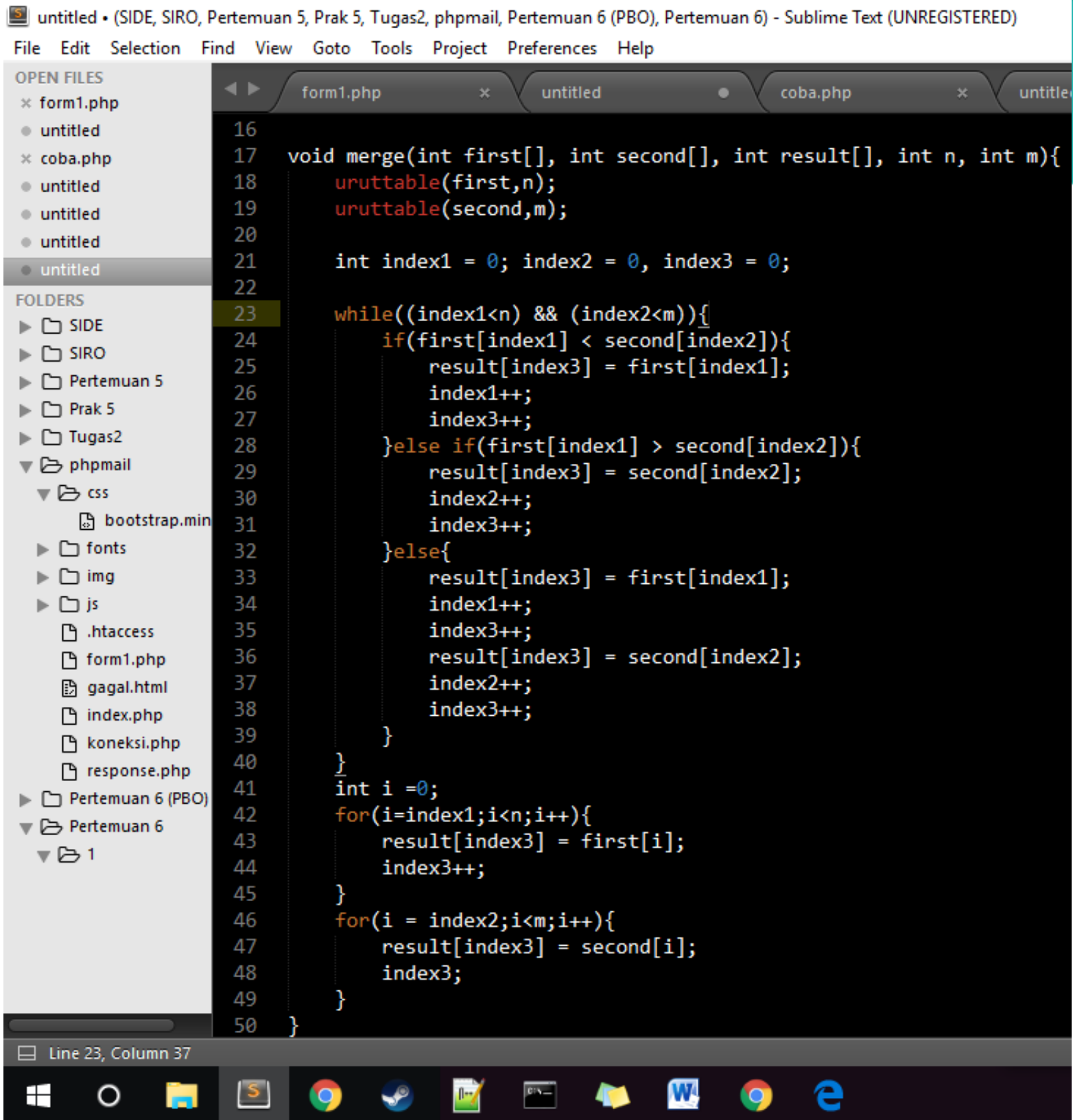


The screenshot shows the Sublime Text editor interface. The title bar at the top reads "untitled • (SIDE, SIRO, Pertemuan 5, Prak 5, Tugas2, phpmail, Pertemuan 6 (PBO), Pertemuan 6) - Sublime Text (U". The menu bar includes "File", "Edit", "Selection", "Find", "View", "Goto", "Tools", "Project", "Preferences", and "Help". On the left, the "OPEN FILES" panel lists "form1.php", "untitled", "coba.php", and several other "untitled" files. The "FOLDERS" panel shows a tree structure with folders like "SIDE", "SIRO", "Pertemuan 5", "Prak 5", "Tugas2", "phpmail", "css", "bootstrap.min", "fonts", "img", and "js". The main editor area displays a C program for table sorting. The code is as follows:

```
1 void uruttable(int tabel[], int n){
2     int tampung;
3     int tukar,i;
4     do{
5         tukar = 0;
6         for (i=0;i<n-1;i++){
7             if(tabel[i] > tabel[i+1]){
8                 tampung = tabel[i];
9                 tabel[i] = tabel[i+1];
10                tabel[i+1] = tampung;
11                tukar = 1;
12            }
13        }
14    }while(tukar == 1);
15 }
16
```

Modul ALPRO 2

- Merge Table procedure

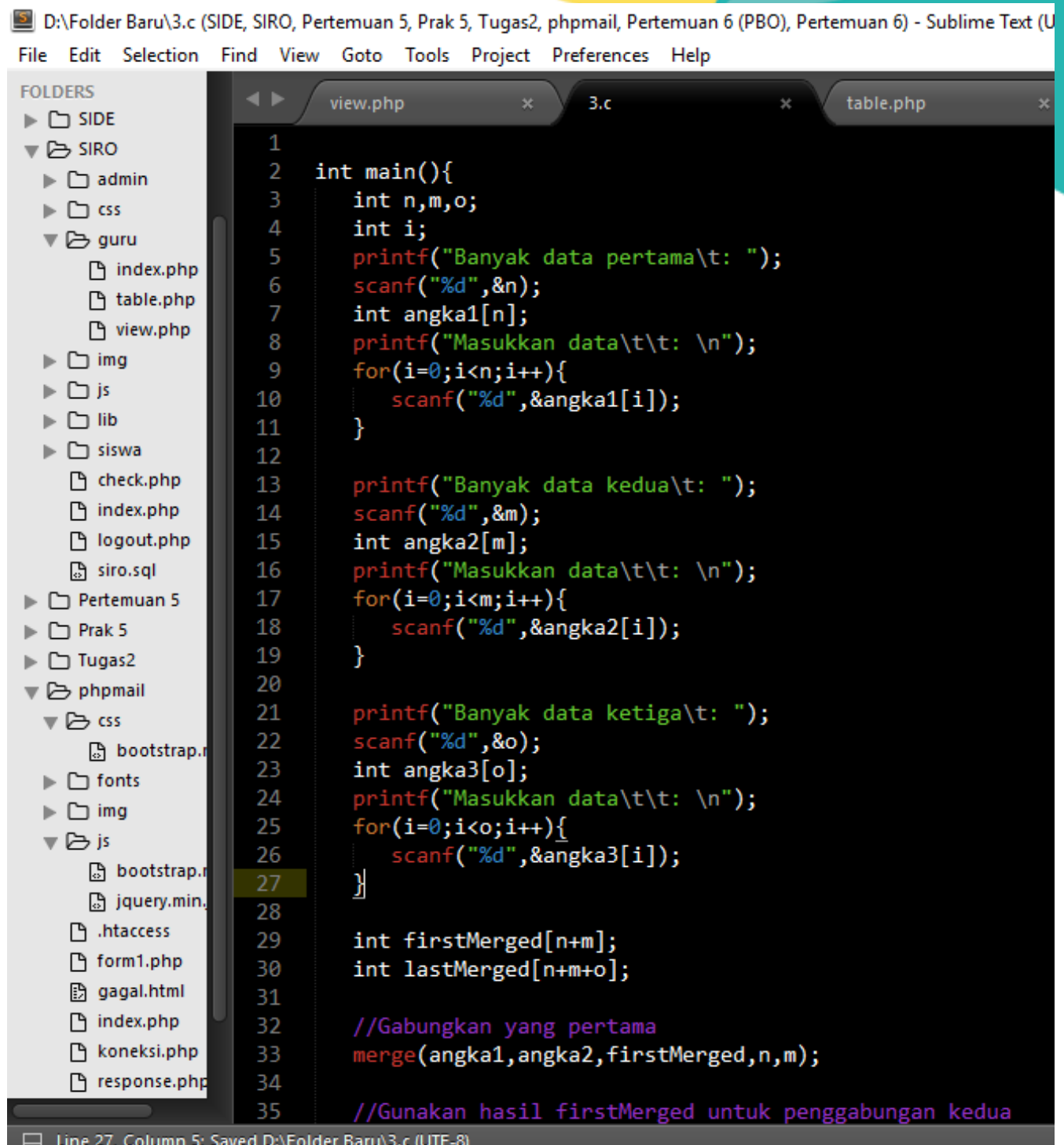


```
16
17 void merge(int first[], int second[], int result[], int n, int m){
18     uruttable(first,n);
19     uruttable(second,m);
20
21     int index1 = 0; index2 = 0, index3 = 0;
22
23     while((index1<n) && (index2<m)){
24         if(first[index1] < second[index2]){
25             result[index3] = first[index1];
26             index1++;
27             index3++;
28         }else if(first[index1] > second[index2]){
29             result[index3] = second[index2];
30             index2++;
31             index3++;
32         }else{
33             result[index3] = first[index1];
34             index1++;
35             index3++;
36             result[index3] = second[index2];
37             index2++;
38             index3++;
39         }
40     }
41     int i =0;
42     for(i=index1;i<n;i++){
43         result[index3] = first[i];
44         index3++;
45     }
46     for(i = index2;i<m;i++){
47         result[index3] = second[i];
48         index3;
49     }
50 }
```

Modul ALPRO 2

Menggabungkan tiga tabel

- Main .c



```
1
2 int main(){
3     int n,m,o;
4     int i;
5     printf("Banyak data pertama\t: ");
6     scanf("%d",&n);
7     int angka1[n];
8     printf("Masukkan data\t\t: \n");
9     for(i=0;i<n;i++){
10         scanf("%d",&angka1[i]);
11     }
12
13     printf("Banyak data kedua\t: ");
14     scanf("%d",&m);
15     int angka2[m];
16     printf("Masukkan data\t\t: \n");
17     for(i=0;i<m;i++){
18         scanf("%d",&angka2[i]);
19     }
20
21     printf("Banyak data ketiga\t: ");
22     scanf("%d",&o);
23     int angka3[o];
24     printf("Masukkan data\t\t: \n");
25     for(i=0;i<o;i++){
26         scanf("%d",&angka3[i]);
27     }
28
29     int firstMerged[n+m];
30     int lastMerged[n+m+o];
31
32     //Gabungkan yang pertama
33     merge(angka1,angka2,firstMerged,n,m);
34
35     //Gunakan hasil firstMerged untuk penggabungan kedua
```

Modul ALPRO 2

(SIDE, SIRO, Pertemuan 5, Prak 5, Tugas2, phpmail, Pertemuan 6 (PBO), Pertemuan 6) - Sublime Text (UNR)

Find View Goto Tools Project Preferences Help

```
view.php x 3.c x table.php x
22 scanf("%d",&o);
23 int angka3[o];
24 printf("Masukkan data\t\t: \n");
25 for(i=0;i<o;i++){
26     scanf("%d",&angka3[i]);
27 }
28
29 int firstMerged[n+m];
30 int lastMerged[n+m+o];
31
32 //Gabungkan yang pertama
33 merge(angka1,angka2,firstMerged,n,m);
34
35 //Gunakan hasil firstMerged untuk penggabungan kedua
36 merge(firstMerged,angka3,lastMerged,n+m,o);
37
38 printf("Data terurut \t :");
39
40 for(i=0;i<n+m+o;i++){
41     printf("%d\n", lastMerged[i]);
42 }
43 }
```

- Gunakan **mesin.c** yang sama

Soal

1. Diberikan sebuah 3 buah tabel data mahasiswa yang berisikan **NAMA** dan **NIM(Bungkusan)**. Gabungkan dan urutkan berdasarkan **NAMA** scr **Ascending** 3 tabel tersebut menggunakan konsep Merge Table.
2. Diberikan 2 buah tabel **stok Alfamart** (Nama,Stok) urutkanlah tabel tersebut berdasarkan banyak huruf konsonan nya secara **Descending**.