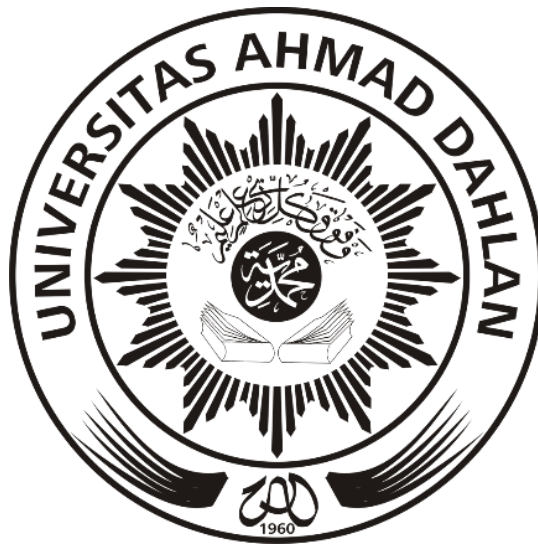


**LAPORAN**  
**PRAKTIKUM ALGORITMA PEMROGRAMAN**



**Disusun Oleh:**  
**FARID HIBATURRACHMAN (2100018444) - KELAS I**

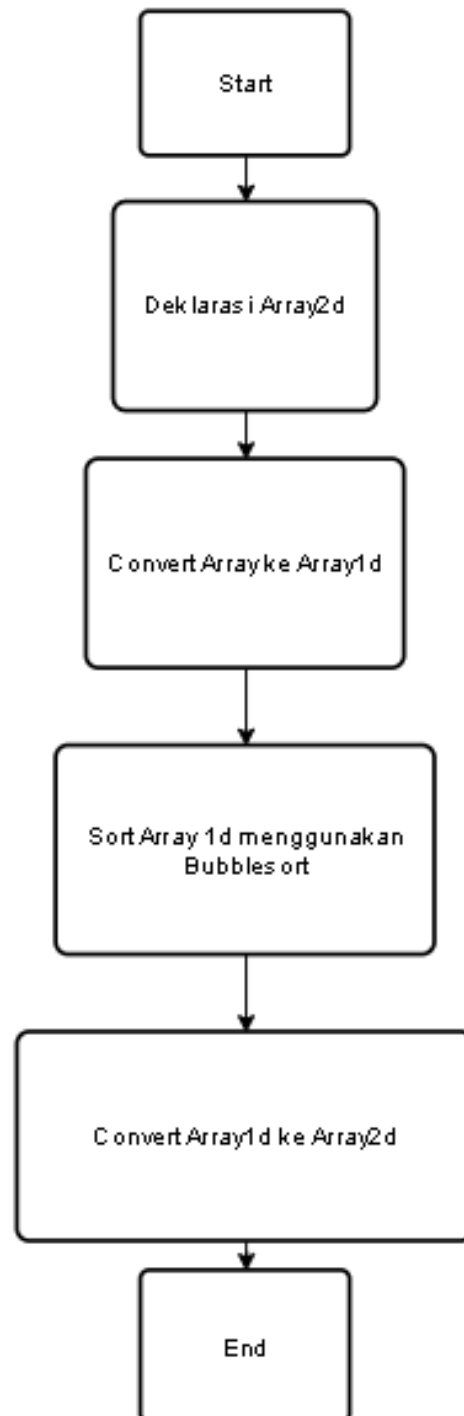
**PROGRAM STUDI INFORMATIKA**  
**FAKULTAS TEKNOLOGI INDUSTRI**  
**UNIVERSITAS AHMAD DAHLAN**

**JUNI 2022**

## Kegiatan

Konsep awal

As



Source code:

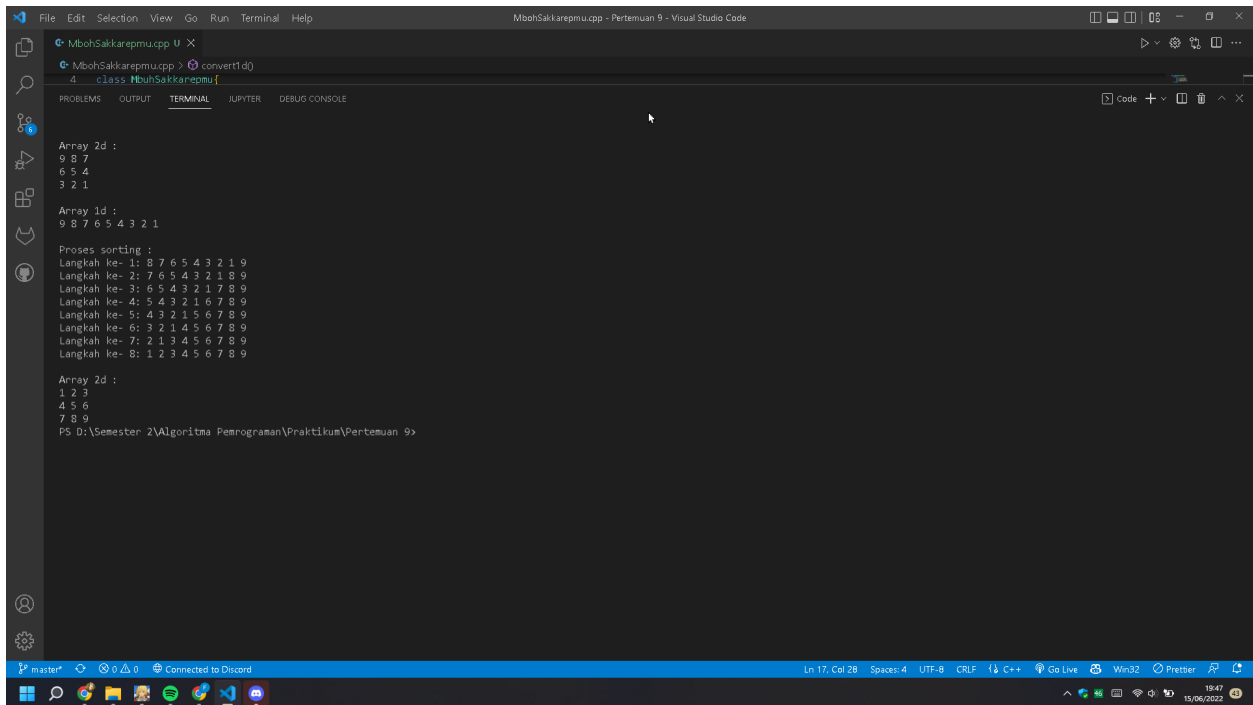
```
File Edit Selection View Go Run Terminal Help MbuhSakarepmu.cpp - Pertemuan 9 - Visual Studio Code

MbuhSakarepmu.cpp > convertId()
1 #include<iostream>
2 using namespace std;
3
4 class MbuhSakarepmu{
5 public:
6     void convertId();
7     void convert2d();
8     void bubbleSort();
9 private:
10     int array[3][3] = {{9,8,7},{6,5,4},{3,2,1}};
11     int arrayId[9];
12     int array2d[3][3];
13     int a,b,x=0;
14 };
15
16 void MbuhSakarepmu::convertId(){
17     cout<<"\nArray 2d :\n";
18     for(int i=0; i<3; i++){
19         for(int j=0; j<3; j++){
20             cout<<array[i][j]<<" ";
21             arrayId[a]=array[i][j];
22             a++;
23         }
24         cout<<"\n";
25     }
26     cout<<"\nArray 1d :\n";
27     for(int i=0; i<9; i++){
28         cout<<arrayId[i]<<" ";
29     }
30     cout<<endl;
31 }
32
33 void MbuhSakarepmu::bubbleSort(){
34     cout<<"\nProses sorting :\n";
35     for(int i=0; i<8; i++){
36         for(int j=0; j<(9-i-1); j++){
37             if(arrayId[j]>arrayId[j+1]){
38                 b = arrayId[j];
39                 arrayId[j] = arrayId[j+1];
40                 arrayId[j+1] = b;
41             }
42         }
43         cout<<"Langkah ke- "<<i+1<<" : ";
44         for(int j=0; j<9; j++){
45             cout<<arrayId[j]<<" ";
46         }
47         cout<<endl;
48     }
49 }
50
51 void MbuhSakarepmu::convert2d(){
52     cout<<"Array 2d :";
53     for (int i=0; i<3;i++) {
54         cout<<"\n";
55         if(x==9){
56             break;
57         }
58         for (int j=0;j<3;j++) {
59             array2d[i][j]=arrayId[x];
60             cout<<array2d[i][j]<<" ";
61             x++;
62         }
63     }
64 }
65
66 int main(){
67     system("cls");
68     MbuhSakarepmu mbuh;
69     mbuh.convertId();
70     mbuh.bubbleSort();
71     mbuh.convert2d();
72 }
```

```
File Edit Selection View Go Run Terminal Help MbuhSakarepmu.cpp - Pertemuan 9 - Visual Studio Code

MbuhSakarepmu.cpp > convertId()
38         b = arrayId[j];
39         arrayId[j] = arrayId[j+1];
40         arrayId[j+1] = b;
41     }
42 }
43 cout<<"Langkah ke- "<<i+1<<" : ";
44 for(int j=0; j<9; j++){
45     cout<<arrayId[j]<<" ";
46 }
47 cout<<endl;
48 }
49
50
51 void MbuhSakarepmu::convert2d(){
52     cout<<"Array 2d :";
53     for (int i=0; i<3;i++) {
54         cout<<"\n";
55         if(x==9){
56             break;
57         }
58         for (int j=0;j<3;j++) {
59             array2d[i][j]=arrayId[x];
60             cout<<array2d[i][j]<<" ";
61             x++;
62         }
63     }
64 }
65
66 int main(){
67     system("cls");
68     MbuhSakarepmu mbuh;
69     mbuh.convertId();
70     mbuh.bubbleSort();
71     mbuh.convert2d();
72 }
```

Hasil run :



```
MbohSakkarepmu.cpp - Pertemuan 9 - Visual Studio Code
MbohSakkarepmu.cpp 4
class MbohSakkarepmu{
    Array 2d :
    9 8 7
    6 5 4
    3 2 1

    Array 1d :
    9 8 7 6 5 4 3 2 1

    Proses sorting :
    Langkah ke- 1: 8 7 6 5 4 3 2 1 9
    Langkah ke- 2: 7 6 5 4 3 2 1 8 9
    Langkah ke- 3: 6 5 4 3 2 1 7 8 9
    Langkah ke- 4: 5 4 3 2 1 6 7 8 9
    Langkah ke- 5: 4 3 2 1 5 6 7 8 9
    Langkah ke- 6: 3 2 1 4 5 6 7 8 9
    Langkah ke- 7: 2 1 3 4 5 6 7 8 9
    Langkah ke- 8: 1 2 3 4 5 6 7 8 9

    Array 2d :
    1 2 3
    4 5 6
    7 8 9
    PS D:\Semester 2\Algoritma Pemrograman\Praktikum\Pertemuan 9>
```