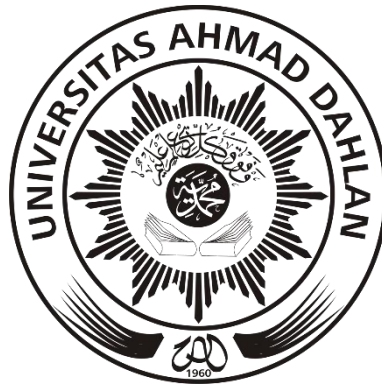


**LAPORAN**  
**ALGORITMA PEMORGRAMAN**

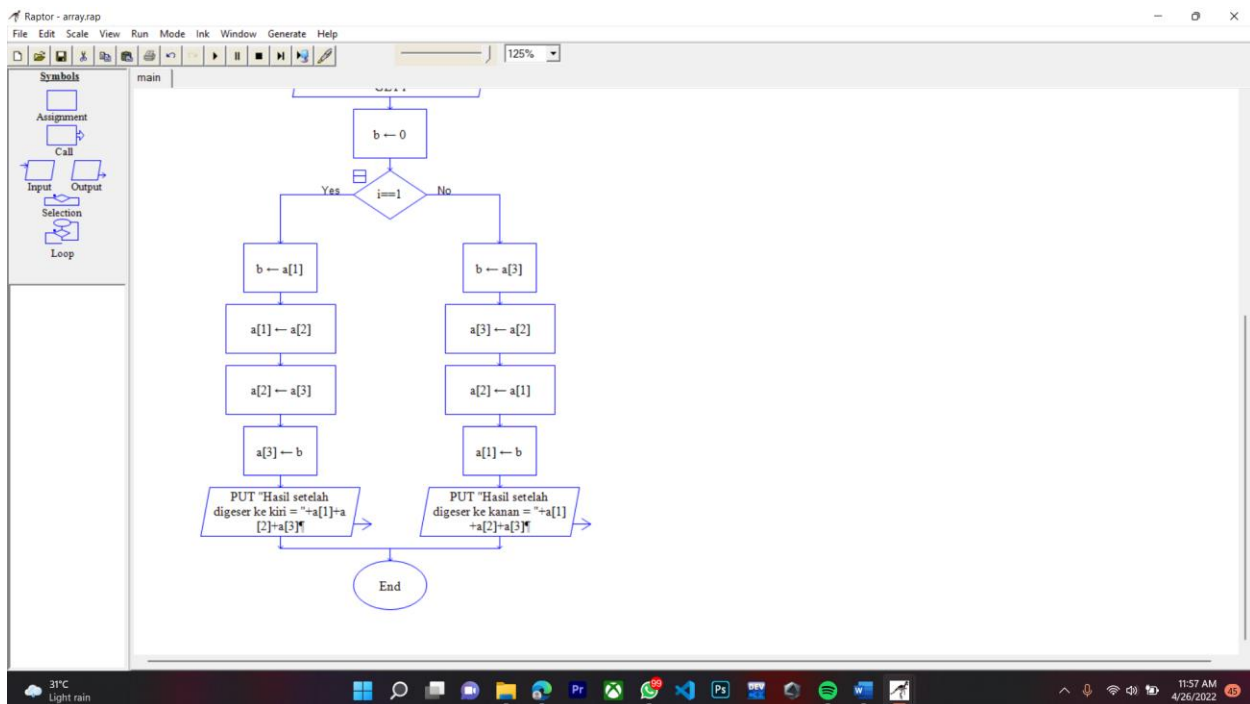
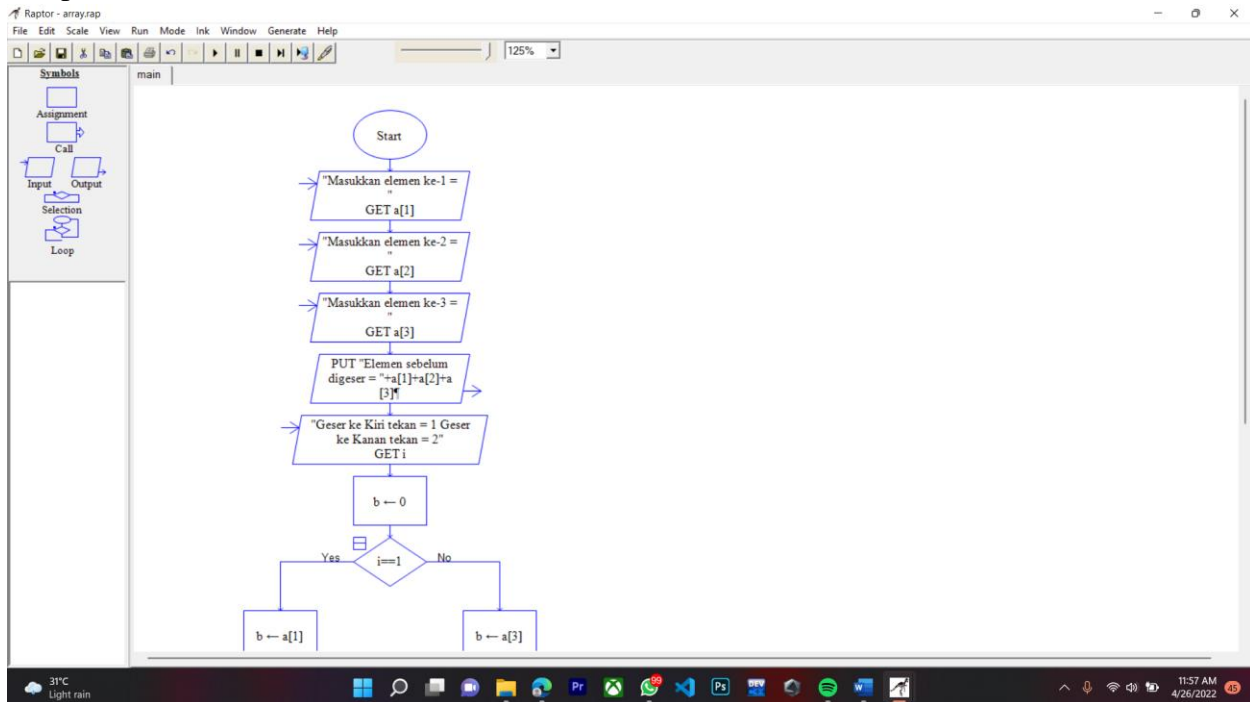


**DISUSUN OLEH**  
RIFAL FEBIYAN (2100018345)  
SLOT SELASA 13.30 – KELAS G

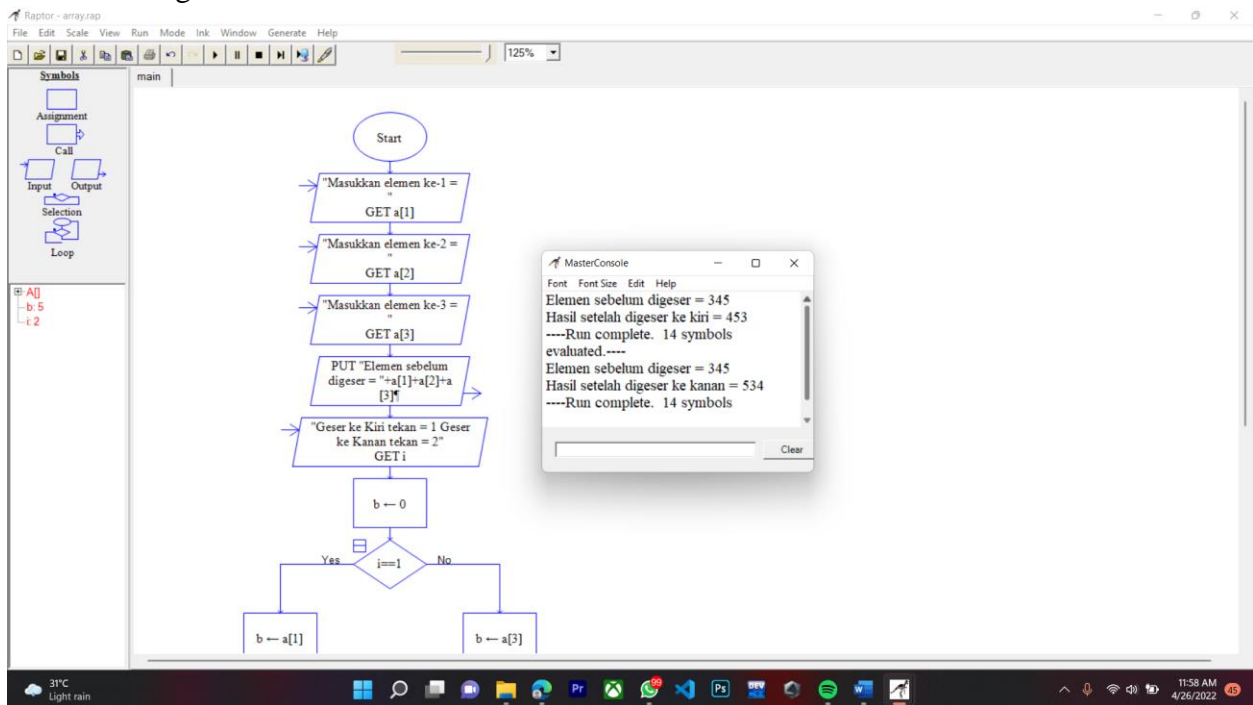
**PROGRAM STUDI INFORMATIKA FAKULTAS**  
**TEKNOLOGI INDUSTRI**  
**UNIVERSITAS AHMAD DAHLAN**  
**TAHUN AJARAN 2021/2022**

## POSTEST 6 : ARRAY SATU DIMENSI

1. Buat lah flowchart untuk menggeser ke kiri atau ke kanan elemen array baik secara iteratif maupun rekursi.

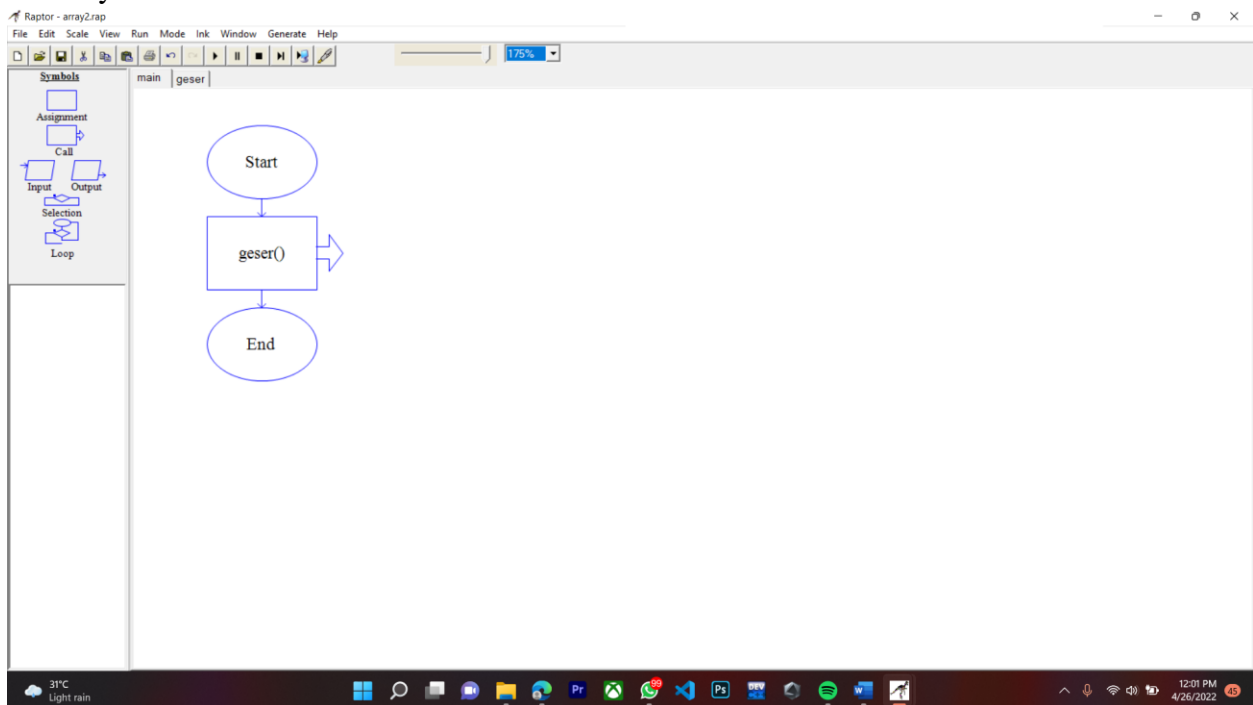


## Hasil Running:

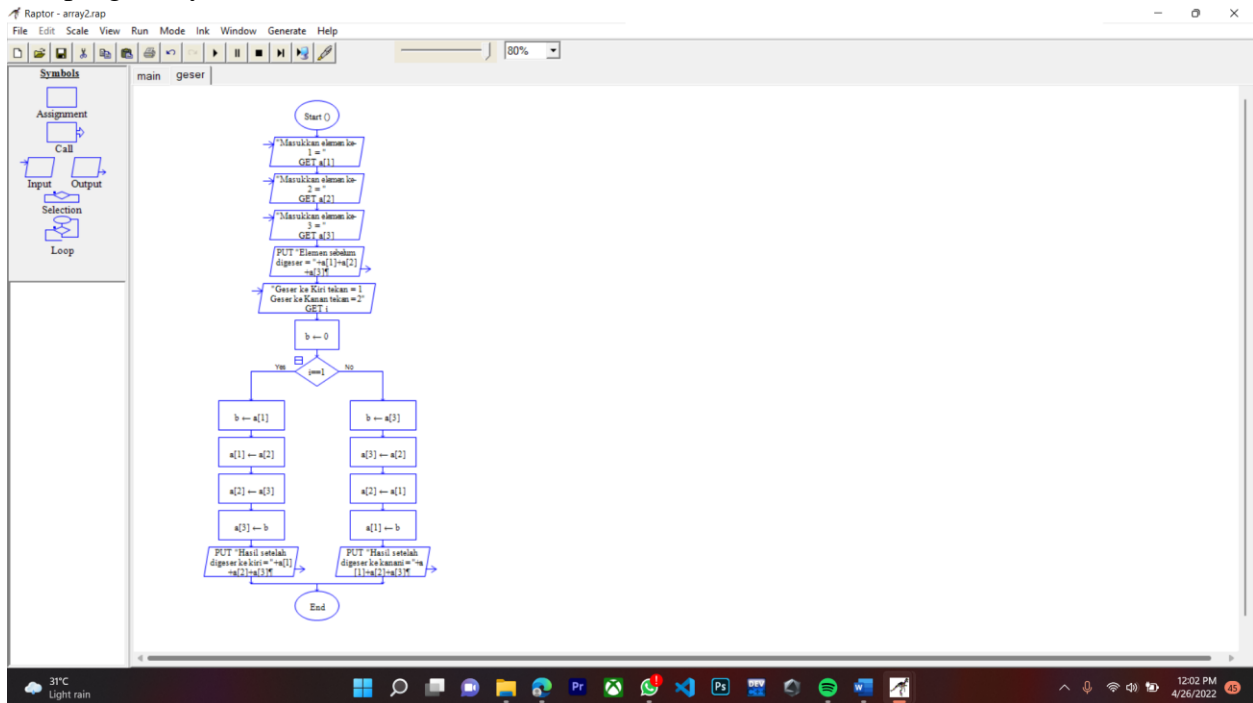


2. Seperti nomor 1, gunakan subprogram dalam flowchart untuk menggeser ke kiri atau ke kanan elemen array baik secara iteratif maupun rekursi.

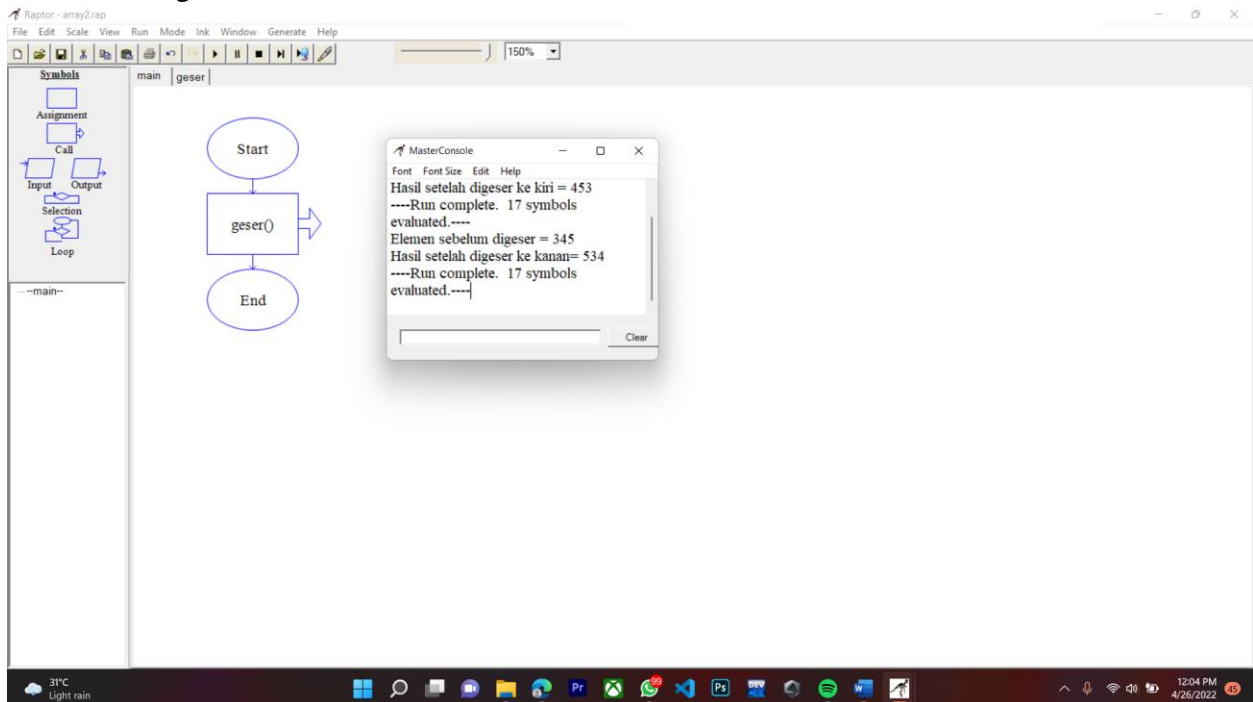
## Main nya:



## Sub programnya:



## Hasil Running:



3. Konversikan hasil dari flowchart nomor 1 dan 2 menjadi program C++.

Nomor 1:

Geser Kiri

```
#include <iostream>
#include <string>

using namespace std;

int main()
{
    int i;
    int b;
    int a[4];

    cout<<"Masukkan elemen ke-1 = ";
    cin >> a[1];
    cout<<"Masukkan elemen ke-2 = ";
    cin >> a[2];
    cout<<"Masukkan elemen ke-3 = ";
    cin >> a[3];
    cout<<"Geser ke Kiri tekan (1) geser ke Kanan tekan (2) : ";
    cin >> i;
    b = 0;
    cout << "Elemen sebelum digeser = "<<a[1]<<a[2]<<a[3] << endl;
    if (i==1)
    {
        b=a[1];
        a[1] = a[2];
        a[2] = a[3];
        a[3] = b;
        cout << "Hasil setelah digeser Kiri = "<<a[1]<<a[2]<<a[3] << endl;
    }
}
```

Output:

```
Masukkan elemen ke-1 = 3
Masukkan elemen ke-2 = 4
Masukkan elemen ke-3 = 5
Geser ke Kiri tekan (1) geser ke Kanan tekan (2) : 1
Elemen sebelum digeser = 345
Hasil setelah digeser Kiri = 453

-----
Process exited after 40.78 seconds with return value 0
Press any key to continue . . .
```

Geser Kanan:

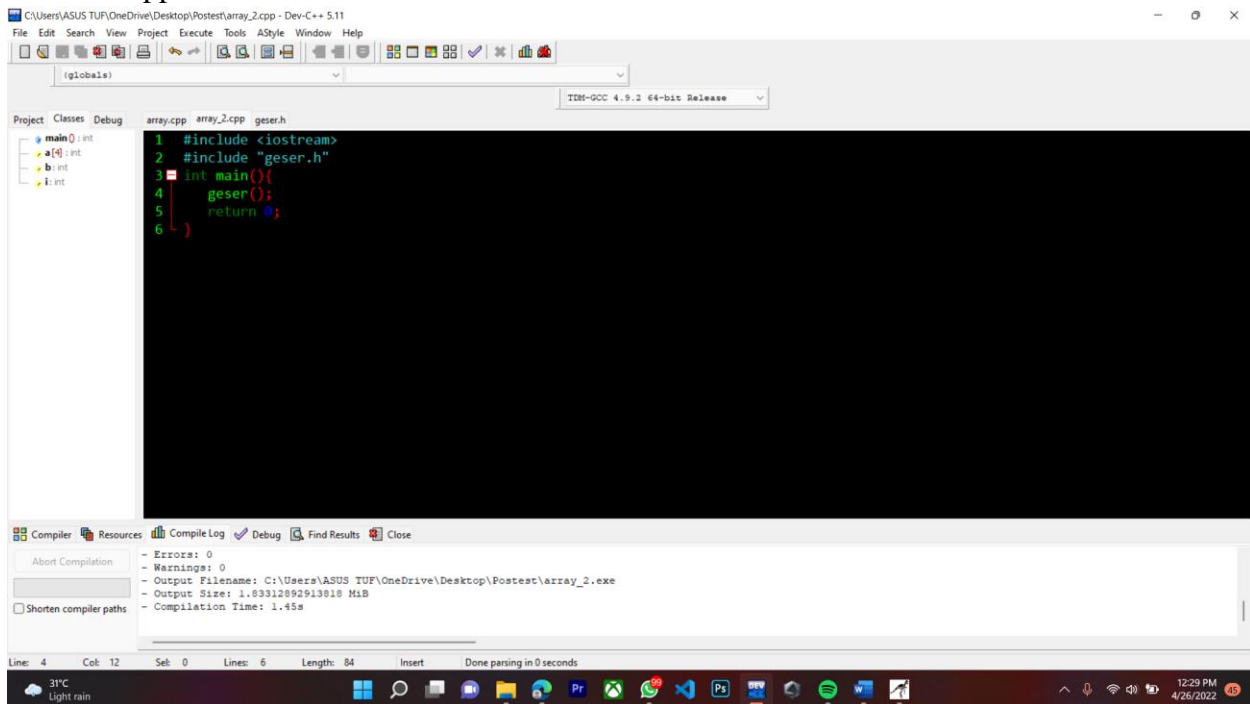
```
cin >> a[1];
cout<<"Masukkan elemen ke-2 = ";
cin >> a[2];
cout<<"Masukkan elemen ke-3 = ";
cin >> a[3];
cout<<"Geser ke Kiri tekan (1) geser ke Kanan tekan (2) : ";
cin >> i;
b = 0;
cout << "Elemen sebelum digeser = "<<a[1]<<a[2]<<a[3] << endl;
if (i==1)
{
    b=a[1];
    a[1] = a[2];
    a[2] = a[3];
    a[3] = b;
    cout << "Hasil setelah digeser Kiri = "<<a[1]<<a[2]<<a[3] << endl;
}
else
{
    b = a[3];
    a[3] = a[2];
    a[2] = a[1];
    a[1] = b;
    cout << "Hasil setelah digeser Ke Kanan = "<<a[1]<<a[2]<<a[3] << endl;
}
return 0;
}
```

Output:

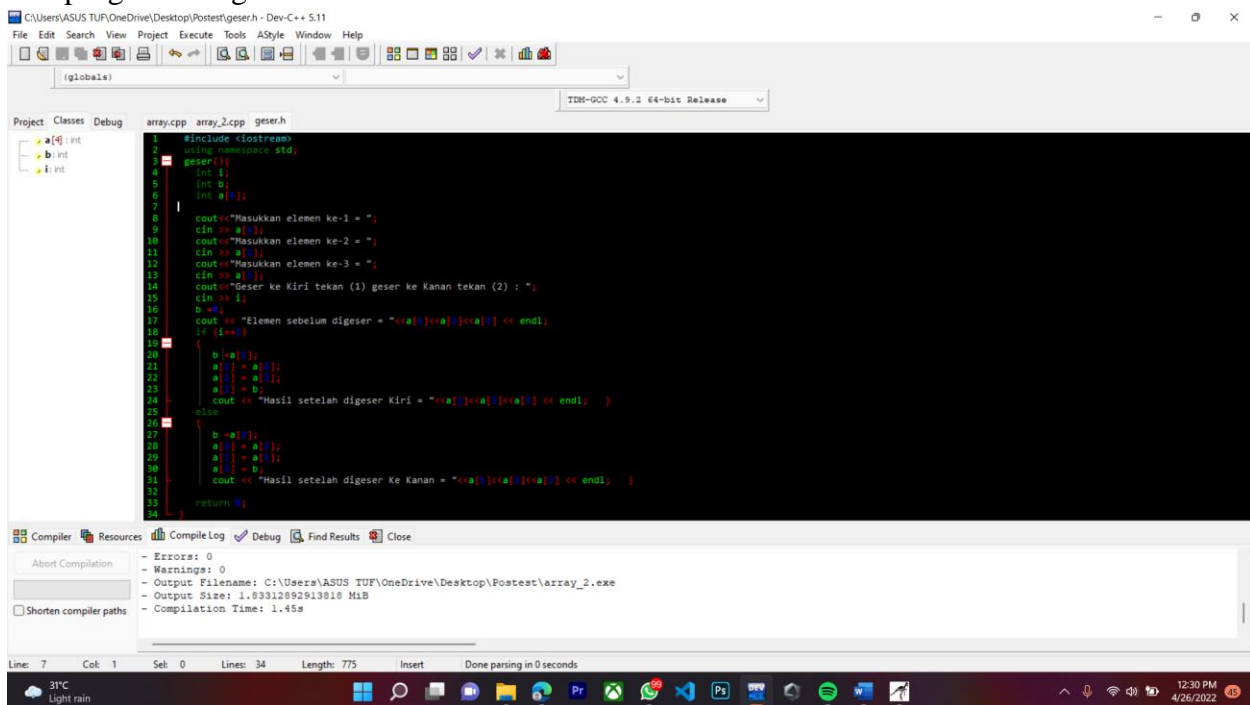
```
Masukkan elemen ke-1 = 3
Masukkan elemen ke-2 = 4
Masukkan elemen ke-3 = 5
Geser ke Kiri tekan (1) geser ke Kanan tekan (2) : 2
Elemen sebelum digeser = 345
Hasil setelah digeser Ke Kanan = 534

-----
Process exited after 5.667 seconds with return value 0
Press any key to continue . . .
```

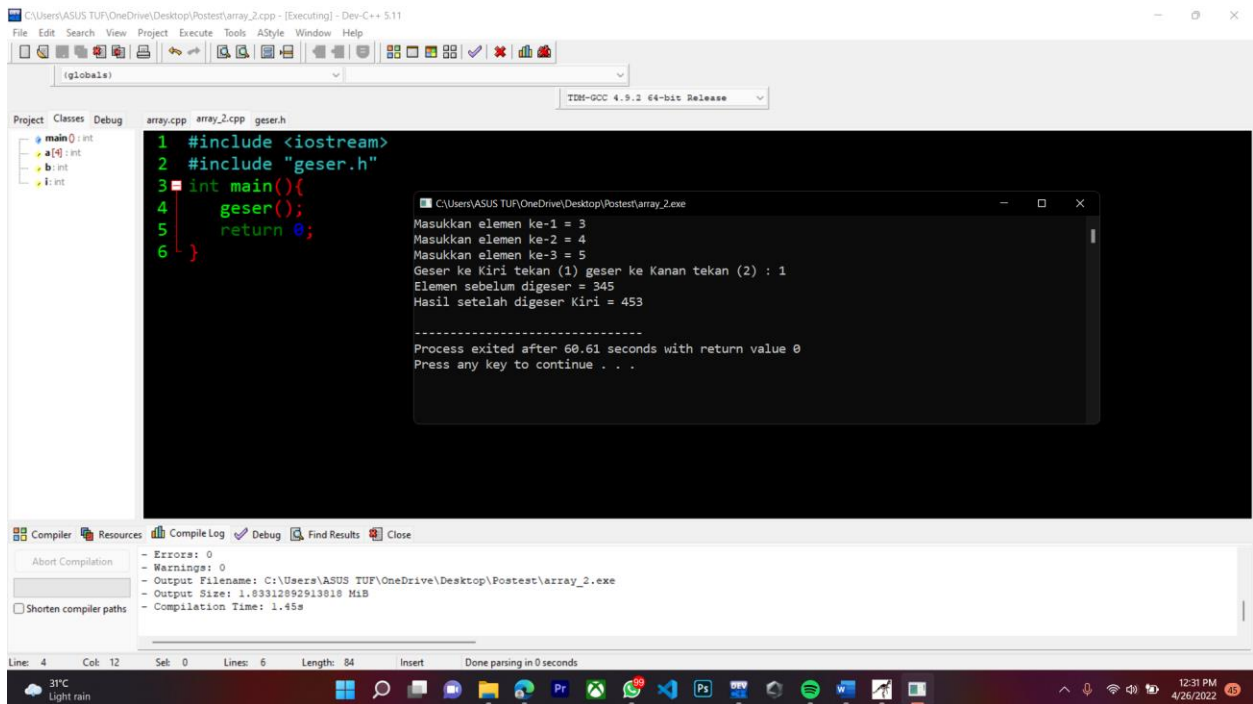
## Nomor 2: file main.cpp:



## Sub program file geser.h



Hasil running:  
Geser ke kiri:



The screenshot shows a C++ IDE with a project named 'array\_2'. The code in 'array\_2.cpp' is as follows:

```
1 #include <iostream>
2 #include "geser.h"
3 int main(){
4     geser();
5     return 0;
6 }
```

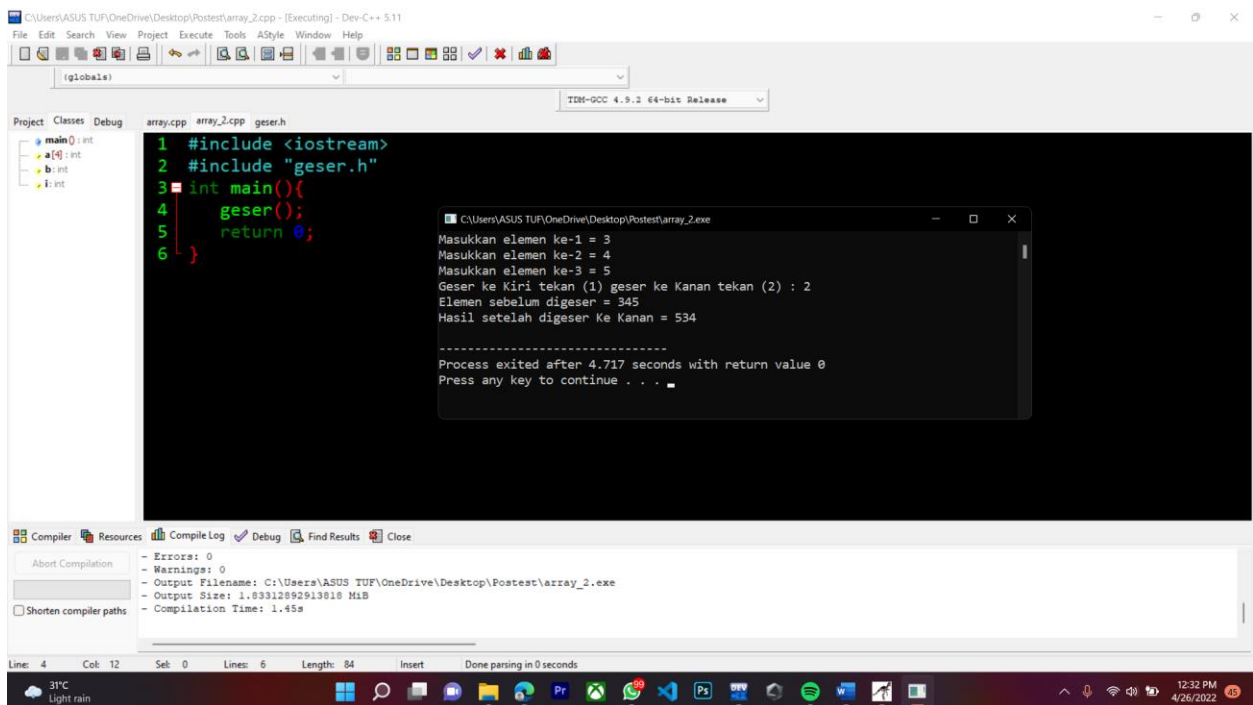
The output window shows the following text:

```
Masukkan elemen ke-1 = 3
Masukkan elemen ke-2 = 4
Masukkan elemen ke-3 = 5
Geser ke Kiri tekan (1) geser ke Kanan tekan (2) : 1
Elemen sebelum digeser = 345
Hasil setelah digeser Kiri = 453

-----
Process exited after 60.61 seconds with return value 0
Press any key to continue . . .
```

The compiler output at the bottom shows no errors or warnings, and the output file is 'array\_2.exe'.

Geser ke kanan:



The screenshot shows the same C++ IDE with the same code as above. The output window shows the following text:

```
Masukkan elemen ke-1 = 3
Masukkan elemen ke-2 = 4
Masukkan elemen ke-3 = 5
Geser ke Kiri tekan (1) geser ke Kanan tekan (2) : 2
Elemen sebelum digeser = 345
Hasil setelah digeser Ke Kanan = 534

-----
Process exited after 4.717 seconds with return value 0
Press any key to continue . . .
```

The compiler output at the bottom is identical to the first screenshot, showing no errors or warnings.

