

**Praktikum Algoritma dan Pemrograman**  
**Fauzy Ramadan 20.14.1.0051**  
**Tugas 3.1 & 3.2**

**Kode Program 3.1**

```
{Nama : Fauzy Ramadan}
{NPM : 20.14.1.0051}
{Program: TUGAS 3.1 .pas}

program Tugas3_1;
uses crt;

var
nilai, quiz, absen, uts, uas, tugas : real;
huruf_mutu : char;

begin
clrscr;
quiz := 40;
absen := 100;
uts := 60;
uas := 50;
tugas := 80;

writeln ('Absen = ', absen:5:2, ' UTS = ', uts:5:2);
writeln ('Tugas = ', tugas:5:2, ' UAS = ', uas:5:2);
writeln ('Quiz = ', quiz:5:2);

nilai := ((0.1*absen)+(0.2*tugas)+(0.3*quiz)+(0.4*uts)+(0.5*uas))/2;

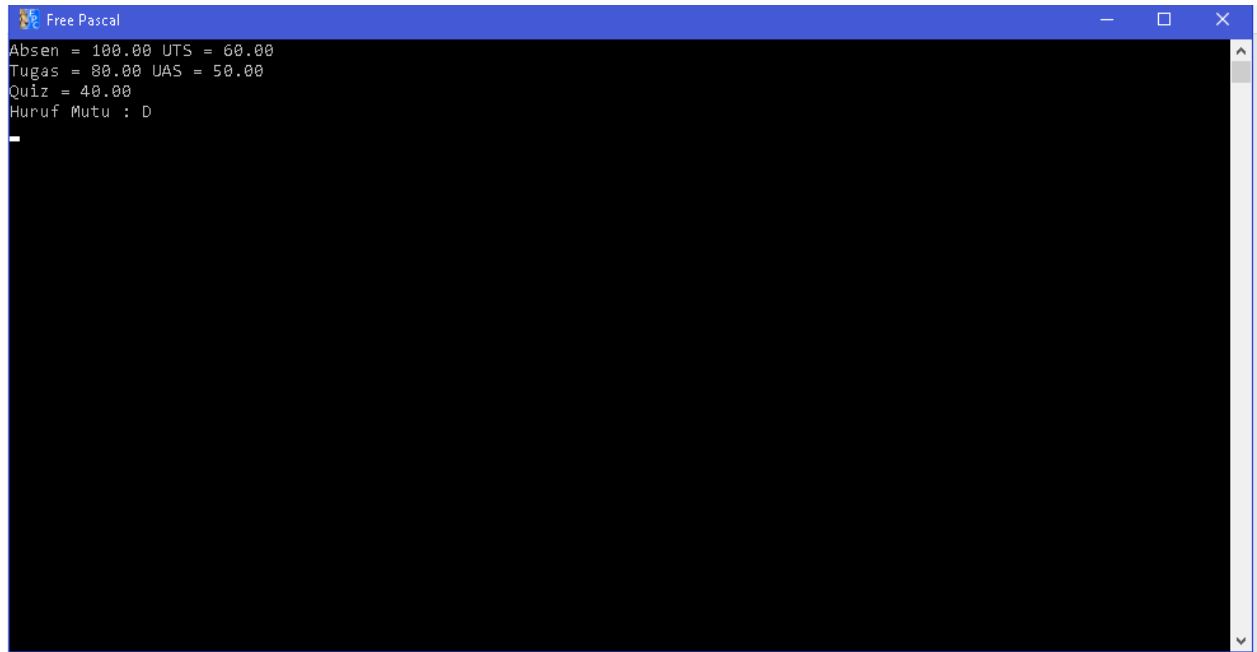
if (nilai > 85) and (nilai <= 100) then
huruf_mutu := 'A'
else if (nilai > 70) and (nilai <= 85) then
huruf_mutu := 'B'
else if (nilai > 55) and (nilai <= 70) then
huruf_mutu := 'C'
else if (nilai > 40) and (nilai <= 55) then
huruf_mutu := 'D'
else if (nilai > 0) and (nilai <= 40) then
huruf_mutu := 'E';

writeln ('Huruf Mutu : ', huruf_mutu);
readln;
end.

else if (nilai > 55) and (nilai <= 70) then
huruf_mutu := 'C'
else if (nilai > 40) and (nilai <= 55) then
huruf_mutu := 'D'
else if (nilai > 0) and (nilai <= 40) then
huruf_mutu := 'E';
```

```
writeln ('Huruf Mutu : ', huruf_mutu);  
readln;  
end.
```

### Screenshot Program 3.1



### Kode Program 3.2

```
{Nama : Fauzy Ramadan}  
{NPM : 20.14.1.0051}  
{Program: Tugas 3.2}
```

```
program Tugas3_2;  
uses crt;
```

```
var  
golongan : Char;  
gajipokok, tunjangan, potonggiuran, persentase, gajibersih : Real;  
status :String;
```

```
begin  
    clrscr;  
    write('Nama Karyawan : ');  
    readln();  
    writeln();  
    write('Golongan (A\B) : ');  
    readln(golongan);  
    writeln();  
    write('Status (Nikah\Belum) : ');  
    readln(status);  
    Writeln();
```

```

case golongan of
    'A' :
        if (status = 'nikah') then
            begin
                gajipokok := 200000;
                tunjangan := 50000;

            end

        else
            begin
                gajipokok := 200000;
                tunjangan := 25000;
            end;

            'B' :
            if (status = 'nikah') then
                begin
                    gajipokok := 350000;
                    tunjangan := 75000;
                end

            else
                begin
                    gajipokok := 350000;
                    tunjangan := 60000;
                end;
end;

if (gajipokok <= 300000) then
    begin
        persentase := 0.05;
    end

else
    begin
        persentase := 0.1;
    end;

potong iuran := (gaji pokok + tunjangan) * persentase;
gajibersih := gaji pokok + tunjangan – potong iuran;

    writeln('gaji pokok : Rp.', gajipokok:4:0);
writeln;
    writeln('tunjangan : Rp.', tunjangan:4:0);
writeln;
    writeln('Potong iuran : Rp.', potong iuran:4:0);
writeln;
    writeln('Gaji bersih : Rp.', gajibersih:4:0);
readln;
end.

```

### Screenshot Program 3.2

A screenshot of a Free Pascal IDE window. The window has a blue title bar with the text "Free Pascal" and standard window controls. The main area is black with white text showing the output of a program. The output lists several variables and their values: Nama Karyawan : anwar, Golongan (A\B) : B, Status (Nikah\Belum) : nikah, gaji\_pokok : Rp.350000, tunjangan : Rp.75000, Potong iuran : Rp.42500, and gaji bersih : Rp.382500. A small white cursor is visible at the end of the last line.

```
Free Pascal
Nama Karyawan : anwar
Golongan (A\B) : B
Status (Nikah\Belum) : nikah
gaji_pokok : Rp.350000
tunjangan : Rp.75000
Potong iuran : Rp.42500
gaji bersih : Rp.382500
```

### Kode Program 3.1 (C++)

```
// Nama : Fauzy Ramadan
// NPM : 20.14.1.0051
// Program : Tugas 3.2

#include <iostream>
using namespace std;
int main()
{
    int nilai, quiz, absen, uts, uas, tugas;
    quiz = 40;
    absen = 100;
    uts = 60;
    uas = 50;
    tugas = 80;

    cout << " Absen = " << absen << endl;
    cout << " Tugas = " << tugas << endl;
    cout << " Quiz = " << quiz << endl;
    cout << " UTS = " << uts << endl;
    cout << " UAS = " << uas << endl;

    nilai = ((0.1 * absen)+(0.2 * tugas)+(0.3 * quiz)+(0.4 * uts)+(0.5 * uas));

    if ((nilai > 85) && (nilai <=100)){
        cout << "Huruf Mutu = A";
    }
    if ((nilai > 70) && (nilai <=85)){
```

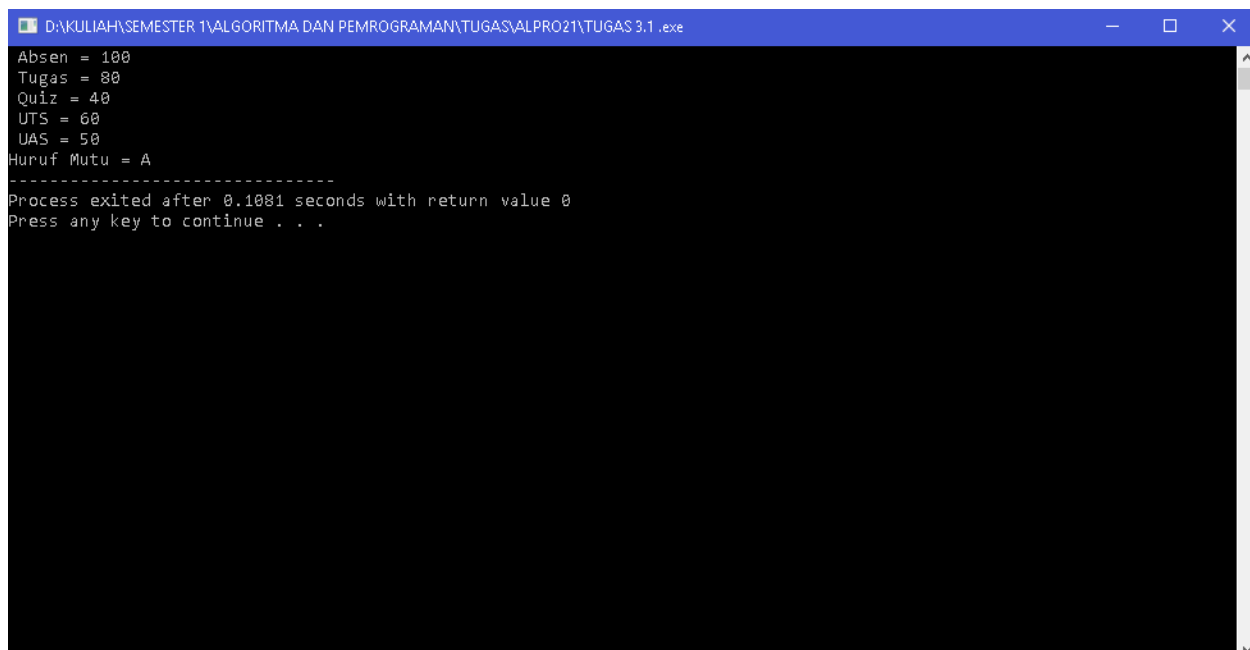
```

        cout << "Huruf Mutu = B";
    }
    if ((nilai > 55) && (nilai <=70)){
        cout << "Huruf Mutu = C";
    }
    if ((nilai > 40) && (nilai <=55)){
        cout << "Huruf Mutu = D";
    }
    if ((nilai > 850) && (nilai <=40)){
        cout << "Huruf Mutu = E";
    }

    return 0;
}

```

### Screenshot Program 3.1 (C++)



The screenshot shows a Windows command prompt window titled "D:\KULIAH\SEMESTER 1\ALGORITMA DAN PEMROGRAMAN\TUGAS\ALPRO21\TUGAS 3.1 .exe". The output of the program is as follows:

```

Absen = 100
Tugas = 80
Quiz = 40
UTS = 60
UAS = 50
Huruf Mutu = A
-----
Process exited after 0.1081 seconds with return value 0
Press any key to continue . . .

```

### Kode Program 3.2 (C++)

```

// Nama : Fauzy Ramadan
// NPM : 20.14.1.0051
// Program : TUGAS 3.2

```

```

#include <iostream>
#include <string.h>
using namespace std;

```

```

int main ()
{
    string nama;
    float persentase;

```

```

int gajipokok, tunjangan, potongiuran, gajibersih;
char golongan,status[6];

cout << "Nama Karyawan : ";
getline(cin,nama);
cout << "Golongan (A/B) : ";
cin >> golongan;
cout << "Status (nikah/belum) : ";
cin>>status;

cout << endl;

switch (golongan)
{
    case 'A' :
        if (strcmp(status,"nikah")==0){
            gajipokok = 200000;
            tunjangan = 50000;
        } else {
            gajipokok = 200000;
            tunjangan = 25000;
        }
        break;
    case 'B' :
        if (strcmp(status,"nikah")==0){
            gajipokok = 350000;
            tunjangan = 75000;
        } else {
            gajipokok = 350000;
            tunjangan = 60000;
        }
        break;
}

if (gajipokok <= 300000){
    persentase = 0.05;
} else {
    persentase = 0.1;
}

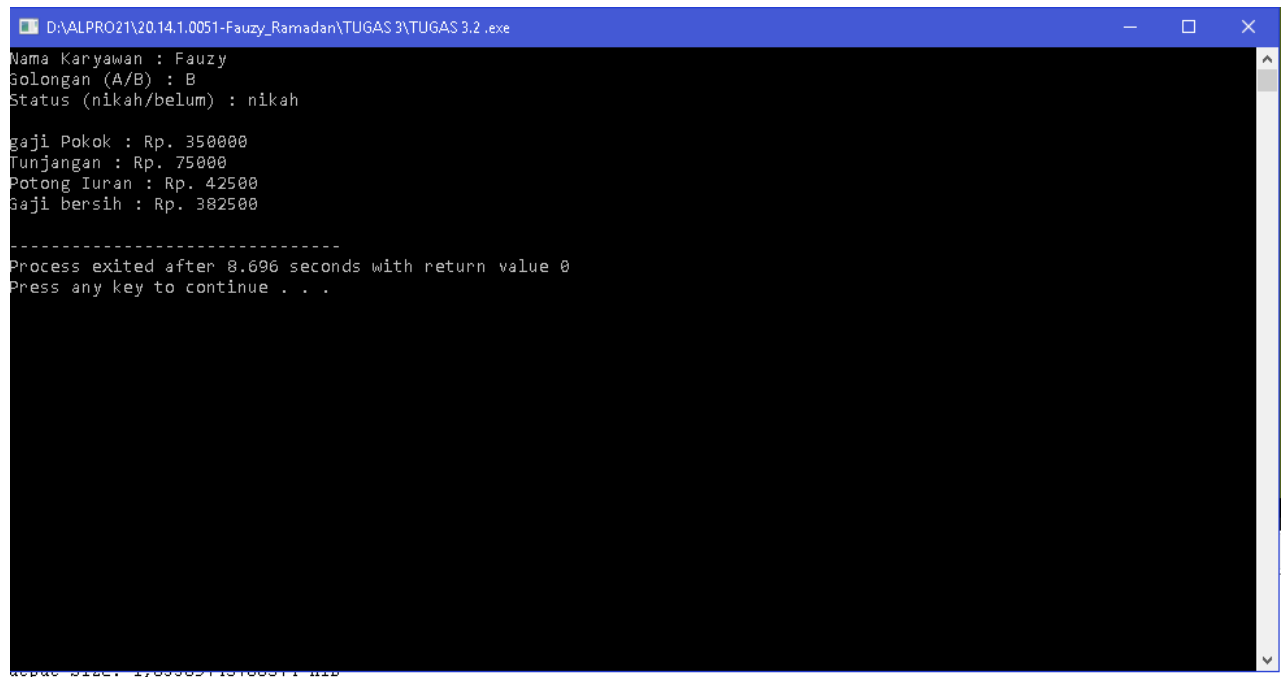
potongiuran = (gajipokok + tunjangan) * persentase;
gajibersih = gajipokok + tunjangan - potongiuran;

cout << "gaji Pokok : Rp. "<<gajipokok << endl;
cout << "Tunjangan : Rp. "<<tunjangan << endl;
cout << "Potong luran : Rp. "<<potongiuran << endl;
cout << "Gaji bersih : Rp. "<<gajibersih<< endl;

return 0;
}

```

### Screecshot Program 3.2 (C++)



The screenshot shows a Windows command prompt window titled "D:\ALPRO21\20.14.1.0051-Fauzy\_Ramadan\TUGAS 3\TUGAS 3.2 .exe". The program has executed and displayed the following text:

```
Nama Karyawan : Fauzy  
Golongan (A/B) : B  
Status (nikah/belum) : nikah  
  
Gaji Pokok : Rp. 350000  
Tunjangan : Rp. 75000  
Potong Iuran : Rp. 42500  
Gaji bersih : Rp. 382500  
  
-----  
Process exited after 8.696 seconds with return value 0  
Press any key to continue . . .
```

At the bottom of the window, there is a small text label: "Kopas Size: 178885715788571 n12".