

Latihan

1. Buatlah program untuk menghitung gaji bersih dari seorang karyawan, dengan ketentuan sebagai berikut :
 - Karyawan memperoleh tunjangan istri 10% dari gaji pokok apabila statusnya sudah menikah.
 - Memperoleh tunjangan anak apabila mempunyai anak. Jumlah anak kecil dari 2 maka tunjangan anak 5% dari gaji pokok, sedangkan jumlah anak lebih besar dari 2 maka tunjangan anak 10% dari gaji pokok.
 - Gaji bersih diperoleh dari tunjangan istri + tunjangan anak + gaji pokok.

Penyelesaian :

- Algoritma :

1. Init. nm, stts, ja, ti, ta, gp, gb.
2. Input nm, stts, ja, gp .
3. if (stts == '1') ti = gp*0.1
 else if (stts == '2') ti = 0
 if (ja < 2) ta = gp*0.05
 else if (ja >= 2) ta = gp*0.1
 gb = ta + ti + gp
4. Tampil nm, stts, ja, gp, gb.

- Program :

```
#include<iostream>

using namespace std;

int main()
{
    string nm;

    char stts;

    short ja;

    int ti, ta, gp, gb;

    cout<<"===== "<<endl;

    cout<<"    Menghitung Gaji Karyawan    "<<endl;
```

```

cout<<"===== "<<endl;
cout<<" Status : 1=Menikah, 2=Belum Menikah "<<endl;
cout<<"===== "<<endl;
cout<<" Nama      :";getline(cin,nm);
cout<<" Status    :";cin>>stts;
cout<<" Jumlah Anak :";cin>>ja;
cout<<" Gaji Pokok  :";cin>>gp;
if(stts=='1') ti=gp*0.1;
else if(stts=='2') ti=0;
if(ja<2) ta=gp*0.05;
else if(ja>=2) ta=gp*0.1;
gb=ta+ti+gp;
cout<<" Nama      : "<<nm<<endl;
cout<<" Status    : "<<stts<<endl;
cout<<" Jumlah Anak : "<<ja<<endl;
cout<<" Gaji Pokok  : "<<gp<<endl;
cout<<" Gaji Bersih : "<<gb<<endl;

}

```

Hasilnya :

```
1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      string nm;
6      char stts;
7      short ja;
8      int ti, ta, gp, gb;
9      cout<<"_____ "<<endl;
10     cout<<endl;
11     cout<<"          Menghitung Gaji Karyawan      "<<endl;
12     cout<<endl;
13     cout<<"_____ "<<endl;
14     cout<<endl;
15     cout<<" Status : 1 = Menikah, 2 = Belum Menikah "<<endl;
16     cout<<endl;
17     cout<<"_____ "<<endl;
18     cout<<" Nama          : ";getline(cin,nm);
19     cout<<" Status       : ";cin>>stts;
20     cout<<" Jumlah Anak   : ";cin>>ja;
21     cout<<" Gaji Pokok    : ";cin>>gp;
22     if(stts=='1') ti=gp*0.1;
23
24     else if(stts=='2') ti=0;
25     if(ja<2) ta=gp*0.05;
26     else if(ja>=2) ta=gp*0.1;
27     gb=ta+ti+gp;
28     cout<<" Nama          : "<<nm<<endl;
29     cout<<" Status       : "<<stts<<endl;
30     cout<<" Jumlah Anak   : "<<ja<<endl;
31     cout<<" Gaji Pokok    : "<<gp<<endl;
32     cout<<" Gaji Bersih   : "<<gb<<endl;
33 }
34
```

```
"D:\T.E.O.E.R\tugas Kuliah\Algoritma Dan Struktur Data 1\Modul 3\Gaji Karyawan\Modul 3_1 (Men...

=====
                        Menghitung Gaji Karyawan
=====

Status : 1 = Menikah, 2 = Belum Menikah

=====
Nama      : Sul
Status    : 1
Jumlah Anak : 3
Gaji Pokok : 1000000
Nama      : Sul
Status    : 1
Jumlah Anak : 3
Gaji Pokok : 1000000
Gaji Bersih : 1200000
```

```
"D:\T.E.O.E.R\tugas Kuliah\Algoritma Dan Struktur Data 1\Modul 3\Gaji Karyawan\Modul 3_1 (Men...

=====
                        Menghitung Gaji Karyawan
=====

Status : 1 = Menikah, 2 = Belum Menikah

=====
Nama      : Sul
Status    : 2
Jumlah Anak : 0
Gaji Pokok : 1000000
Nama      : Sul
Status    : 2
Jumlah Anak : 0
Gaji Pokok : 1000000
Gaji Bersih : 1050000
```

2. Buatlah program untuk menghitung pemasangan baru rekening pelanggan PLN, dengan ketentuan sebagai berikut :

Jenis Pelanggan	Sambungan	Harga
Rumah Tangga	0 – 450 Watt	650000
	451 – 900 Watt	850000
	9001 – 1200 Watt	1200000
	1200 – 2200 Watt	1500000
	2201 – 4400 Watt	1750000
Industri	4401 – 9500 Watt	2250000
	9501 – 12000 Watt	2750000
	12001 – 16000 Watt	3250000
	16001 – 22000 Watt	4500000
	Diatas 22001	6700000

Ketentuan untuk pemasangan baru ditambah dengan Ppn 10% dan administrasi 5% dari harga untuk setiap sambungan.

Penyelesaian :

- Algoritma :

1. Inisialisasi ket, nmp, alp, jp, smb, hrg, hpb.
2. Input nmp, alp, jp, smb.
3. If (jp='1')
 - If (smb==1) {
 - ket = "0-400"
 - hrg = "650000"
 - hpb = hrg+(hrg*0.1)+(hrg*0.05)
 - }
 - else If (smb==2) {
 - ket = "451-900"
 - hrg = "850000"
 - hpb = hrg+(hrg*0.1)+(hrg*0.05)
 - }
 - else if(smb==3){
 - ket="9001-1200";
 - hrg=1200000;

```

        hpb=hrg+(hrp*0.1)+(hrp*0.05);
    }
    else if(smb==4){
        ket="1200-2200";
        hrg=1500000;
        hpb=hrg+(hrp*0.1)+(hrp*0.05);
    }
    else if(smb==5){
        ket="2201-4400";
        hrg=17500000;
        hpb=hrg+(hrp*0.1)+(hrp*0.05);
    }
}

if(jp=='2')
    if(smb==1){
        ket="4401-9500";
        hrg=2250000;
        hpb=hrg+(hrp*0.1)+(hrp*0.05);
    }
    else if(smb==2){
        ket="9501-12000";
        hrg=2750000;
        hpb=hrg+(hrp*0.1)+(hrp*0.05);
    }
    else if(smb==3){
        ket="12001-16000";
        hrg=3250000;
        hpb=hrg+(hrp*0.1)+(hrp*0.05);
    }
    else if(smb==4){
        ket="16001-22000";
        hrg=4500000;
        hpb=hrg+(hrp*0.1)+(hrp*0.05);
    }
    else if(smb==5){
        ket="di atas 22001";
        hrg=6700000;
        hpb=hrg+(hrp*0.1)+(hrp*0.05);
    }
}

```

4. Tampil nmp, alp, smb, hrg, hpb.

- Program :

```
#include<iostream>
using namespace std;
int main()
{
    string ket, nmp, alp;
    char jp;
    int smb, hrg, hpb;
    cout<<"          JENIS PELANGGAN          "<<endl;
    cout<<"===== "<<endl;
    cout<<"Rumah Tangga (1) | "<<" (1) 0-400 watt    = 650000 | "<<endl;
    cout<<"          "<<" (2) 451-900 watt  = 850000 | "<<endl;
    cout<<"          "<<" (3) 9001-1200 watt = 1200000 | "<<endl;
    cout<<"          "<<" (4) 1200-2200 watt = 1500000 | "<<endl;
    cout<<"          "<<" (5) 2201-4400 watt = 1750000 | "<<endl;
    cout<<"===== "<<endl;
    cout<<"Industri  (2) | "<<" (1) 4401-9500 watt = 2250000 | "<<endl;
    cout<<"          "<<" (2) 9501-12000 watt = 2750000 | "<<endl;
    cout<<"          "<<" (3) 12001-16000 watt = 3250000 | "<<endl;
    cout<<"          "<<" (4) 16001-22000 watt = 4500000 | "<<endl;
    cout<<"          "<<" (5) Diatas 22001    = 6700000 | "<<endl;
    cout<<"===== "<<endl;

    cout<<" Nama Pelanggan  :";getline(cin,nmp);
    cout<<" Alamat Pelanggan  :";getline(cin,alp);
    cout<<" Jenis Pelanggan  :";cin>>jp;
    cout<<" Sambungan      :";cin>>smb;

    if(jp=='1')
    if(smb==1){
        ket="0-400";
        hrg=650000;
        hpb=hrg+(hrg*0.1)+(hrg*0.05);
    }
    else if(smb==2){
        ket="451-900";
        hrg=850000;
        hpb=hrg+(hrg*0.1)+(hrg*0.05);
    }
    else if(smb==3){
        ket="9001-1200";
        hrg=1200000;
        hpb=hrg+(hrg*0.1)+(hrg*0.05);
    }
    else if(smb==4){
        ket="1200-2200";
        hrg=1500000;
        hpb=hrg+(hrg*0.1)+(hrg*0.05);
    }
}
```

```

    }
    else if(smb==5){
        ket="2201-4400";
        hrg=17500000;
        hpb=hrp+(hrp*0.1)+(hrp*0.05);
    }

    if(jp=='2')
    if(smb==1){
        ket="4401-9500";
        hrg=2250000;
        hpb=hrp+(hrp*0.1)+(hrp*0.05);
    }
    else if(smb==2){
        ket="9501-12000";
        hrg=2750000;
        hpb=hrp+(hrp*0.1)+(hrp*0.05);
    }
    else if(smb==3){
        ket="12001-16000";
        hrg=3250000;
        hpb=hrp+(hrp*0.1)+(hrp*0.05);
    }
    else if(smb==4){
        ket="16001-22000";
        hrg=4500000;
        hpb=hrp+(hrp*0.1)+(hrp*0.05);
    }
    else if(smb==5){
        ket="di atas 22001";
        hrg=6700000;
        hpb=hrp+(hrp*0.1)+(hrp*0.05);
    }

    cout<<"======"<<endl;
    cout<<" Rekening Pelanggan PLN "<<endl;
    cout<<"======"<<endl;
    cout<<" Nama Pelanggan      :"<<nmp<<endl;
    cout<<" Alamat Pelanggan    :"<<alp<<endl;
    cout<<" Sambungan          :"<<smb<<endl;
    cout<<" Harga              :"<<hrp<<endl;
    cout<<" Harga Pemasangan Baru :"<<hpb<<endl;
    cout<<"======"<<endl;
    cout<<"      Terima Kasih    "<<endl;
    cout<<"======"<<endl;

}

```


Hasilnya :

```
1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      string ket, nmp, alp;
6      char jp;
7      int smb, hrg, hpb;
8      cout<<"                JENIS PELANGGAN                "<<endl;
9      cout<<"===== "<<endl;
10     cout<<"Rumah Tangga (1) | "<<" (1) 0-400 watt      = 650000 | "<<endl;
11     cout<<"                "<<" (2) 451-900 watt    = 850000 | "<<endl;
12     cout<<"                "<<" (3) 9001-1200 watt   = 1200000 | "<<endl;
13     cout<<"                "<<" (4) 1200-2200 watt   = 1500000 | "<<endl;
14     cout<<"                "<<" (5) 2201-4400 watt   = 1750000 | "<<endl;
15     cout<<"===== "<<endl;
16     cout<<"Industri      (2) | "<<" (1) 4401-9500 watt  = 2250000 | "<<endl;
17     cout<<"                "<<" (2) 9501-12000 watt = 2750000 | "<<endl;
18     cout<<"                "<<" (3) 12001-16000 watt = 3250000 | "<<endl;
19     cout<<"                "<<" (4) 16001-22000 watt = 4500000 | "<<endl;
20     cout<<"                "<<" (5) Diatas 22001    = 6700000 | "<<endl;
21     cout<<"===== "<<endl;
22 }
```

```
23     cout<<" Nama Pelanggan      : ";getline(cin,nmp);
24     cout<<" Alamat Pelanggan     : ";getline(cin,alp);
25     cout<<" Jenis Pelanggan        : ";cin>>jp;
26     cout<<" Sambungan              : ";cin>>smb;
27
28     if(jp=='1')
29     {
30         if(smb==1){
31             ket="0-400";
32             hrg=650000;
33             hpb=hrg+(hrg*0.1)+(hrg*0.05);
34         }
35         else if(smb==2){
36             ket="451-900";
37             hrg=850000;
38             hpb=hrg+(hrg*0.1)+(hrg*0.05);
39         }
40         else if(smb==3){
41             ket="9001-1200";
42             hrg=1200000;
43             hpb=hrg+(hrg*0.1)+(hrg*0.05);
44         }
45         else if(smb==4){
```

```

45         ket="1200-2200";
46         hrg=1500000;
47         hpb=hrg+(hrg*0.1)+(hrg*0.05);
48     }
49     else if(smb==5){
50         ket="2201-4400";
51         hrg=17500000;
52         hpb=hrg+(hrg*0.1)+(hrg*0.05);
53     }
54
55     if(jp=='2')
56     {
57         if(smb==1){
58             ket="4401-9500";
59             hrg=2250000;
60             hpb=hrg+(hrg*0.1)+(hrg*0.05);
61         }
62         else if(smb==2){
63             ket="9501-12000";
64             hrg=2750000;
65             hpb=hrg+(hrg*0.1)+(hrg*0.05);
66         }
67         else if(smb==3){

```

```

67         ket="12001-16000";
68         hrg=3250000;
69         hpb=hrg+(hrg*0.1)+(hrg*0.05);
70     }
71     else if(smb==4){
72         ket="16001-22000";
73         hrg=4500000;
74         hpb=hrg+(hrg*0.1)+(hrg*0.05);
75     }
76     else if(smb==5){
77         ket="di atas 22001";
78         hrg=6700000;
79         hpb=hrg+(hrg*0.1)+(hrg*0.05);
80     }
81
82     cout<<"===== "<<endl;
83     cout<<" Rekening Pelanggan PLN "<<endl;
84     cout<<"===== "<<endl;
85     cout<<" Nama Pelanggan      : "<<nmp<<endl;
86     cout<<" Alamat Pelanggan     : "<<alp<<endl;
87     cout<<" Sambungan           : "<<smb<<endl;
88     cout<<" Harga                : "<<hrg<<endl;

```

```

89     cout<<" Harga Pemasangan Baru : "<<hpb<<endl;
90     cout<<"===== "<<endl;
91     cout<<"          Terima Kasih          "<<endl;
92     cout<<"===== "<<endl;
93
94
95 }
96

```

The screenshot shows a Windows command prompt window titled "D:\T.E.O.E.R\Tugas Kuliah\Algoritma Dan Struktur Data 1\Modul 3\Pemasangan baru rek.PLN\Mo...". The program output is as follows:

```

JENIS PELANGGAN
=====
Rumah Tangga <1> : <1> 0-400 watt      = 650000 |
                  <2> 451-900 watt    = 850000 |
                  <3> 9001-1200 watt   = 1200000 |
                  <4> 1200-2200 watt   = 1500000 |
                  <5> 2201-4400 watt   = 1750000 |
=====
Industri          <2> : <1> 4401-9500 watt = 2250000 |
                  <2> 9501-12000 watt = 2750000 |
                  <3> 12001-16000 watt = 3250000 |
                  <4> 16001-22000 watt = 4500000 |
                  <5> Diatas 22001    = 6700000 |
=====
Nama Pelanggan    :Sul
Alamat Pelanggan  :Limba_b
Jenis Pelanggan   :1
Sambungan         :2
=====
Rekening Pelanggan PLN
=====
Nama Pelanggan    :Sul
Alamat Pelanggan  :Limba_b
Sambungan         :2
Harga             :850000
Harga Pemasangan Baru :977500
=====
Terima Kasih
=====

```

```
"D:\T.E.O.E.R\Tugas Kuliah\Algoritma Dan Struktur Data 1\Modul 3\Pemasangan baru rek.PLN\Mo...

JENIS PELANGGAN
=====
Rumah Tangga <1> : <1> 0-400 watt      = 650000 :
                  <2> 451-900 watt    = 850000 :
                  <3> 9001-1200 watt  = 1200000 :
                  <4> 1200-2200 watt  = 1500000 :
                  <5> 2201-4400 watt  = 1750000 :
=====
Industri          <2> : <1> 4401-9500 watt = 2250000 :
                  <2> 9501-12000 watt = 2750000 :
                  <3> 12001-16000 watt = 3250000 :
                  <4> 16001-22000 watt = 4500000 :
                  <5> Diatas 22001    = 6700000 :
=====
Nama Pelanggan    :Sul
Alamat Pelanggan  :Limba_B
Jenis Pelanggan   :2
Sambungan         :1
=====
Rekening Pelanggan PLN
=====
Nama Pelanggan    :Sul
Alamat Pelanggan  :Limba_B
Sambungan         :1
Harga             :2250000
Harga Pemasangan Baru :2587500
=====
Terima Kasih
=====
```