

Module 01

# Logic If, else if & else

Data Science Developer

# Assignment Operators

Operator	Example	Same As
=	x = y	x = y
+=	x += y	x = x + y
-=	x -= y	x = x - y
*=	x *= y	x = x * y
/=	x /= y	x = x / y
%=	x %= y	x = x % y
<<=	x <<= y	x = x << y
>>=	x >>= y	x = x >> y
>>>=	x >>>= y	x = x >>> y
&=	x &= y	x = x & y
^=	x ^= y	x = x ^ y
=	x  = y	x = x   y
**=	x **= y	x = x ** y

# Assignment Operators

```
usiaAndi = 40;
```

```
usiaAndi *= 2;  
print(usiaAndi);  
usiaAndi /= 2;  
print(usiaAndi);  
usiaAndi += 2  
print(usiaAndi);  
usiaAndi -= 2  
print(usiaAndi);  
usiaAndi %= 2  
print(usiaAndi);
```

# Comparison Operators

<code>==</code>	value sama, dan data type sama
<code>&gt;</code>	lebih dari
<code>&lt;</code>	kurang dari
<code>&gt;=</code>	lebih dari sama dengan
<code>&lt;=</code>	kurang dari sama dengan

# Logical Operators

<code>and</code>	(keduanya benar, maka TRUE)
<code>or</code>	(salah satu benar, maka TRUE)
<code>not</code>	(membalik logika TRUE/FALSE)

# Comparison Operators

```
x = 5;  
y = '5';
```

```
print(x == y);  
print(x > int(y));  
print(x >= int(y));  
print(x < int(y));  
print(x <= int(y));
```

# Logical Operators

```
x = 5;  
y = '5';  
z = 6;
```

```
print(x==int(y) and int(y)<z);  
print(x==int(y) or int(y)<z);  
print(not(x==int(y) or int(y)<z));
```

# If, else if & else

```
if (condition) :  
    program;  
elif (condition) :  
    program;  
else :  
    program;
```

# If, else if & else

```
nilai = 40;
```

```
if (nilai > 80) :  
    print('Excellent!');  
elif (nilai >= 60 and nilai <= 80) :  
    print('Good job!');  
else :  
    print("Don't give up!");
```



# If, else if & else

```
jomblo = True;
```

```
if (jomblo) :  
    print('Masih jomblo!');  
else :  
    print('Udah taken!');
```

# Solve it! #1

```
PS D:\Purwadhika\Purwadhika\Python Fundamental> python fundamental.py
Masukkan angka : 7
Angka 7 tergolong bilangan GANJIL!
PS D:\Purwadhika\Purwadhika\Python Fundamental> python fundamental.py
Masukkan angka : 6
Angka 6 tergolong bilangan GENAP!
```

## Solve it! #2

$$\text{IMT} = \text{massa}(\text{kg}) / \text{tinggi}(\text{meter})^2$$

- a.  $\text{IMT} < 18.5$  artinya berat badan kurang,
- b.  $18.5 - 24.9$  artinya berat badan ideal,
- c.  $25.0 - 29.9$  artinya BB berlebih,
- d.  $30.0 - 39.9$  artinya BB sangat berlebih,
- e.  $\text{IMT} > 39.9$  artinya obesitas.

Masukkan Massa(kg) : 67

Masukkan Tinggi(cm) : 178

Massa 67 kg & tinggi 1.78 m

IMT = 21.146319909102385, BERAT BADAN IDEAL!