

NAMA : ANGGA NUGRAHA
NPM : 2414101060
MATKUL : DASAR PEMROGRAMAN

LATIHAN PRAKTIKUM PYTHON DAN C++

1. Biodata Mahasiswa

Input

```
Nama      = "ANGGA NUGRAHA"
Umur       = 20
Npm        = 241401060
Ipk        = 4
Status     = True

print(f"""
--- BIODATA MAHASISWA ---
Nama = {Nama}
Umur = {Umur}
Npm  = {Npm}
Ipk  = {Ipk}
""")

if Status == True:
    print("Mahasiswa Aktif")
else:
    print("Mahasiswa Tidak Aktif")
```

Output

```
--- BIODATA MAHASISWA ---
Nama = ANGGA NUGRAHA
Umur = 20
Npm  = 241401060
Ipk  = 4

Mahasiswa Aktif
```

Input

```
#include <iostream>
#include <string>
using namespace std;

int main(){
    string nama = "angga nugraha";
    int umur = 20;
    long long npm = 2414101060;
    int ipk = 4;
    int status = true;

    cout << "--- BIODATA MAHASISWA ---" << endl;
    cout << "NAMA = " << nama << endl;
    cout << "UMUR = " << umur << endl;
    cout << "NPM = " << npm << endl;
    cout << "IPK = " << ipk << endl;

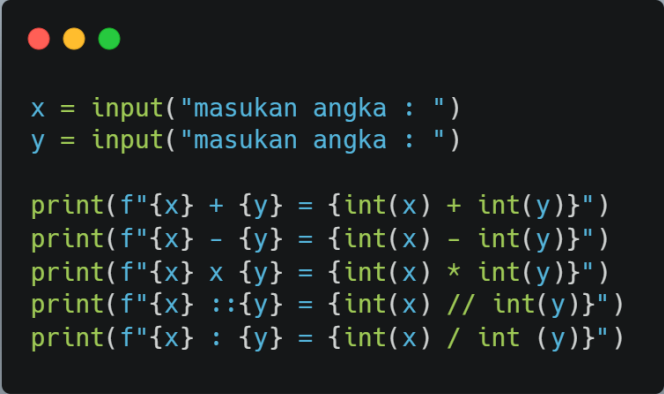
    if(status == true){
        cout << "Mahasiswa aktif" << endl;
    }
    else{
        cout << "mahasiswa tidak aktif" << endl;
    }
}
```

Output

```
--- BIODATA MAHASISWA ---
NAMA = angga nugraha
UMUR = 20
NPM = 2414101060
IPK = 4
Mahasiswa aktif
```

2. Aritmatika

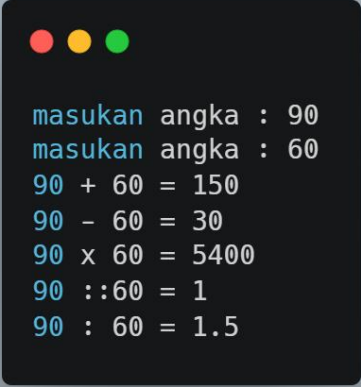
Input

A screenshot of a code editor window with a dark background and three colored window control buttons (red, yellow, green) in the top-left corner. The code is written in Python and performs arithmetic operations on two input numbers, x and y.

```
x = input("masukan angka : ")
y = input("masukan angka : ")

print(f"{x} + {y} = {int(x) + int(y)}")
print(f"{x} - {y} = {int(x) - int(y)}")
print(f"{x} x {y} = {int(x) * int(y)}")
print(f"{x} :: {y} = {int(x) // int(y)}")
print(f"{x} : {y} = {int(x) / int (y)}")
```

Output

A screenshot of a terminal window with a dark background and three colored window control buttons (red, yellow, green) in the top-left corner. It shows the output of the Python program when x=90 and y=60.

```
masukan angka : 90
masukan angka : 60
90 + 60 = 150
90 - 60 = 30
90 x 60 = 5400
90 ::60 = 1
90 : 60 = 1.5
```

Input

```
#include <iostream>
using namespace std;

int X = 5;
int Y = 10;

int main(){
    cout << X << " + " << Y << " = " << X + Y << endl;
    cout << X << " - " << Y << " = " << X - Y << endl;
    cout << X << " : " << Y << " = " << X / Y << endl;
    cout << X << " X " << Y << " = " << X * Y << endl;
    cout << X << " % " << Y << " = " << X % Y << endl;
}
```

Output

```
5 + 10 = 15
5 - 10 = -5
5 : 10 = 0
5 X 10 = 50
5 % 10 = 5
```

3. Menghitung Lingkaran

Input

```
import math

x = 4.7
y = 4.3

print("--- Python ---")
print("ceil (pembulatan ke atas):", math.ceil(x)) # 5
print("floor (pembulatan ke bawah):", math.floor(x)) # 4
print("round (pembulatan terdekat):", round(y)) # 4
print("trunc (potong desimal):", math.trunc(x)) # 4
```

Output

```
ceil (pembulatan ke atas): 5
floor (pembulatan ke bawah): 4
round (pembulatan terdekat): 4
trunc (potong desimal): 4
```

Input

```
#include <iostream>
#include <cmath>
using namespace std;

int main() {
    double x = 4.7;
    double y = 4.3;

    cout << "--- C++ ---" << endl;
    cout << "ceil (pembulatan ke atas): " << ceil(x) << endl; // 5
    cout << "floor (pembulatan ke bawah): " << floor(x) << endl; // 4
    cout << "round (pembulatan terdekat): " << round(y) << endl; // 4
    cout << "trunc (potong desimal): " << trunc(x) << endl; // 4

    return 0;
}
```

Output

```
ceil (pembulatan ke atas): 5
floor (pembulatan ke bawah): 4
round (pembulatan terdekat): 4
trunc (potong desimal): 4
```