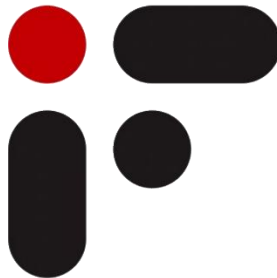


**UJIAN AKHIR SEMESTER**  
**PEMROGRAMAN DASAR**  
**INSTITUT TEKNOLOGI NASIONAL BANDUNG**



NAMA : MUHAMMAD BINTANG FIRDAUS WILDAN  
NRP : 15-2021-162  
TANGGAL : 10 JANUARI 2023

Source Code :

```
#include <iostream>
#include <conio.h>
#include <iomanip>
#include <math.h>
using namespace std;

int main()
{
    float X[300];
    float Y[300];
    float data, totalX, totalY, totalXY, totalXkuadrat, totalYKuadrat,
    kuadrattotalX;
    int i, ulang, korelasi;
    cout << "\n";
    cout << " UAS PEMROGRAMAN DASAR\n" << endl;
    cout << " Nama : MUHAMMAD BINTANG FIRDAUS W [15-2021-162]" << endl;
    cout << " Kelas : DD" << endl;
    cout << " _____" << endl;
    cout << endl ;
    do
    {
        totalX=0, totalY=0, totalXY=0, totalXkuadrat=0, totalYKuadrat=0;
        cout << endl;
        cout << "Input Jumlah N : " ; cin >> data ;
        cout << endl ;
        //input data
        for (i=0 ; i<data ; i++)
        {
            cout << "INPUT X-" << i+1 << " : " ; cin >> X[i];
            cout << "INPUT Y-" << i+1 << " : " ; cin >> Y[i];
            cout << endl;
        }
    }
```

```
cout << endl;
```

```
for (i=0 ; i<data ; i++)
```

```
totalXY=totalXY+(X[i]*Y[i]);
```

```
for (i=0 ; i<data ; i++)
```

```
{
```

```
totalX=totalX+X[i];
```

```
totalY=totalY+Y[i];
```

```
}
```

```
for (i=0 ; i<data ; i++)
```

```
totalXkuadrat=totalXkuadrat+(X[i]*X[i]);
```

```
for (i=0 ; i<data ; i++)
```

```
totalYKuadrat=totalYKuadrat+(Y[i]*Y[i]);
```

```
for (i=0 ; i<data ; i++)
```

```
kuadrattotalX=totalX*totalX;
```

```
float pkt1 = 2;
```

```
float nX = data*totalX;
```

```
float pangkatA = pow(nX,pkt1);
```

```
float akarA = sqrt((data*totalXkuadrat)-(pangkatA));
```

```
float pkt2 = 2;
```

```
float nY = data*totalY;
```

```
float pangkatB = pow(nY,pkt2);
```

```
float akarB = sqrt((data*totalYKuadrat)-(pangkatB));
```

```
float r=((data*totalXY)- (totalX*totalY)) / ( akarA + akarB );
```

```
float koefisiendeterminasi = (r*r) * (100/100);
```

```
if (r<0.09)
```

```

{
cout << "Hubungan korelasi diabaikan"; cin >> korelasi;
}
if (r<0.29)
{
cout << "Hubungan korelasi rendah"; cin >> korelasi;
}
if (r<0.49)
{
cout << "Hubungan korelasi moderat"; cin >> korelasi;
}
if (r<0.70)
{
cout << "Hubungan korelasi sedang"; cin >> korelasi;
}
if (r>0.70)
{
    cout << "Hubungan korelasi sangat kuat"; cin >> korelasi;
}

cout << "Output yang Dihasilkan" << endl;
cout << "a. Nilai Korelasi R = " << r << endl;
cout << "b. Koefisien Determinasi = " << koefisiendeterminasi << endl;
cout << "c. Kekuatan Hubungan dari Nilai Korelasi = " << korelasi <<
endl;
getch();
cout << " " << endl;
cout << "Ingin mengulang (Y/T) ?" ;
ulang=getch();
} while (ulang=='Y' || ulang=='y');
return 0;
}

```

OutPut :

```
UAS PEMROGRAMAN DASAR

Nama : MUHAMMAD BINTANG FIRDAUS W [15-2021-162]
Kelas : DD

Input Jumlah N : 8

INPUT X-1 : 3
INPUT Y-1 : 5

INPUT X-2 : 4
INPUT Y-2 : 8

INPUT X-3 : 9
INPUT Y-3 : 7

INPUT X-4 : 4
INPUT Y-4 : 6

INPUT X-5 : 5
INPUT Y-5 : 8

INPUT X-6 : 0
INPUT Y-6 : 6

INPUT X-7 : 4
INPUT Y-7 : 2

INPUT X-8 : 1
INPUT Y-8 : 9

Output yang Dihasilkan
a. Nilai Korelasi R = nan
b. Koefisien Determinasi = nan
c. Kekuatan Hubungan dari Nilai Korelasi = 4255328
```