Nama : **Bilhaq Avi Dewantara**

NIM : **120140141**

Kelas : **RB**

Pertemuan : **Minggu 1 & 2**

TUGAS

1. Latihan 1

```cpp
1) #include <iostream>
2) using namespace std;
3)
4) int deret(int x){
5)     if(x==1)
6)         return 1;
7)     else deret(x-1); cout << x-1 << "+";
8)     return x;
9) }
10)
11) int main()
12) {
13)     int n;
14)     cout << "Masukkan Angka : ";
15)     cin >> n;
16)     if(n<=0){
17)         cout << "Tidak dapat dihitung" << endl;
18)         exit(0);
19)     }
20)     cout << deret(n);
21)     cout << endl;
22)     return 0;
23) }
24)
```

2. Latihan 2

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

long int deret2(int x){
    if(x==1) return 2;
    else deret2(x-1); cout << 2*x-2 << "+";
        return x*2;
}

int main()
{
    int n;
    cout << "Masukkan Angka : ";
    cin >> n;
    cout << deret2(n) << endl;
    return 0;
}
```

3. Latihan 3

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

long int DeretSegitiga(int x,int y, int z){
    int sum=y+z;

    if (y == x){
        cout << sum;
        return 0;
    } else cout << sum << ", ";
        return DeretSegitiga(x,y+1, sum);
}

int main()
{
    int n;
    cout << "Masukkan Angka : ";
    cin >> n;

    DeretSegitiga(n, 1, 0);
    cout << endl;

    return 0;
}
```

4. Latihan 4

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

long int isGanjil(int input){
    if (input == 0){
        cout << "false"; return 0;
    }
    else if (input == 1){
        cout << "true"; return 0;
    } else return isGanjil(input-2);
}

int main()
{
    int input;
    cout << "Masukkan angka : ";
    cin >> input;

    isGanjil(input);

    cout << endl;
    return 0;
}
```

5. Latihan 5

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

long int LuasBS(int p, int q, int r, int Sisi)
{
    int t = q + r + Sisi;
    if (q==0)
    {
        cout << "sisi " << Sisi <<" -> luas = " << Sisi << endl;
    } else
    {
        cout << "sisi " << Sisi << " -
> luas = " << r << " + " << q+Sisi << " = " << t << endl;
    }
    if (Sisi==p)
    {
        return 0;
    } else
    {
        return LuasBS(p, q+1, t, Sisi+1);
    }
}

int main()
{
    int input;
    cout << "Masukkan Angka : ";
    cin >> input;
    LuasBS(input,0,0,1);

    return 0;
}
```

6. Mohon maaf Pak, saya masih belum paham dengan soal latihan 6 ini

7. Latihan 7

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

int Aneh(int z){
    if(z > 0){
        if(z % 2 == 0){
            return z - Aneh(z-3) * Aneh(z-2);
    } else {
        return z + Aneh(z-2) * Aneh(z-1);
    }
        } else {
            return z;
        }
}



int main()
{
    cout << Aneh(6) << endl;
}
```

Penjelasan latihan 7 :

Input : Aneh(6)
    return 6 – Aneh(3) * Aneh (4)

    Aneh(3)
    return 3 + Aneh(1) * Aneh(2)

      Aneh(1)
      return 1 + Aneh(-1) * Aneh (0)
            Aneh(-1) return -1, Aneh(0) retun 0
            = 1 + (-1) * 0
      Aneh(1) = return 1

      Aneh(2)
      return 2 - Aneh(-1) * Aneh(0)
            = 2 - (-1) * 0
      Aneh(2) = return 2

    Aneh(3)   = return 3 + 1 * 2
               = return 5

Aneh(4)
return 4 – Aneh(1) * Aneh(2)
= 4 – 1 * 2
Aneh(4) = return 2

Aneh(6)
return 6 – Aneh(3) * Aneh(4)
= 6 – 5 * 2
= 6 – 10
Aneh(6) = return -4