

Kelompok

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Penambahan tanaman pada garden dan nama garden

```
Tugas 12 PBO.cpp
155 |
156 | };
157 |
158 | class Lili : public plant{
159 |     private :
160 |         string jenis;
161 |
162 |     public :
163 |         Lili (){}
164 |         plant();
165 |         jenis = "Lili";
166 |     }
167 |
168 |     void cekondisitumbuh(){
169 |         if(jumlahair >= 1 && jumlahpupuk >= 1){
170 |             cout<<"Lili tumbuh "<<endl;
171 |             tumbuh();
172 |         }
173 |         else{
174 |             cout<<"jumlah air lili = "<<jumlahair<<endl;
175 |             cout<<"jumlah pupuk lili = "<<jumlahpupuk<<endl;
176 |         }
177 |     }
178 |     void tumbuh(){
179 |         if(statustumbuh < 4){
180 |             jumlahair = jumlahair - 1;
181 |             jumlahpupuk = jumlahpupuk - 1;
182 |             statustumbuh++;
183 |         }
184 |     }
185 |     string getjenis(){
186 |         return jenis;
187 |     }
188 | };
189 |
190 |
```

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Tugas 12 PBO.cpp

```
317 int inp = 0;
318 do{
319     cout<<"\n";
320     cout << "-----" <<endl;
321     cout << "                Green Garden                " <<endl;
322     cout << "-----" <<endl;
323     cout << "Silahkan menambahkan tumbuhan terlebih dahulu" <<endl<<endl;
324     cout << "1. menambahkan plant" <<endl;
325     cout << "2. beri Anggrek air" <<endl;
326     cout << "3. beri Anggrek pupuk" <<endl;
327     cout << "4. beri Mawar air" <<endl;
328     cout << "5. beri Mawar pupuk" <<endl;
329     cout << "6. beri Melati air" <<endl;
330     cout << "7. beri Melati pupuk" <<endl;
331     cout << "8. beri Lili air" <<endl;
332     cout << "9. beri Lili pupuk" <<endl;
333     cout << "999. keluar" <<endl;
334
335     cout<<"Masukan pilihan = ";cin>>inp;
336     switch(inp){
337     case 1:
338         int pil;
339         cout<<"1. Anggrek" <<endl;
340         cout<<"2. Mawar" <<endl;
341         cout<<"3. Melati" <<endl;
342         cout<<"4. Lili" <<endl;
343         cout<<"Masukkan = ";cin>>pil;
344         if(pil == 1){
345             t.addanggrek(a);
346         }
347         else if(pil == 2){
348             t.addmawar(m);
349         }
350         else if(pil == 3){
351             t.addmelati(e);
352         }
353     }
```

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C:\Users\ASUS\Documents\Tugas 12 PBO.exe

```
5. beri Mawar pupuk
6. beri Melati air
7. beri Melati pupuk
8. beri Lili air
9. beri Lili pupuk
999. keluar
Masukan pilihan = 1
1. Anggrek
2. Mawar
3. Melati
4. Lili
Masukkan = 4
menambahkan Lili

-----
                Green Garden
                -----
Silahkan menambahkan tumbuhan terlebih dahulu

1. menambahkan plant
2. beri Anggrek air
3. beri Anggrek pupuk
4. beri Mawar air
5. beri Mawar pupuk
6. beri Melati air
7. beri Melati pupuk
8. beri Lili air
9. beri Lili pupuk
999. keluar
Masukan pilihan =
```

```
C:\Users\ASUS\Documents\Tugas 12 PBO.exe
4. beri Mawar air
5. beri Mawar pupuk
6. beri Melati air
7. beri Melati pupuk
8. beri Lili air
9. beri Lili pupuk
999. keluar
Masukan pilihan = 8
jumlah air Lili = 1
jumlah pupuk Lili = 0

-----
Green Garden
-----
Silahkan menambahkan tumbuhan terlebih dahulu

1. menambahkan plant
2. beri Anggrek air
3. beri Anggrek pupuk
4. beri Mawar air
5. beri Mawar pupuk
6. beri Melati air
7. beri Melati pupuk
8. beri Lili air
9. beri Lili pupuk
999. keluar
Masukan pilihan = 9
Lili tumbuh
```

```
#include<iostream>
```

```
#include <cstdint>
```

```
#include <vector>
```

```
#include <string>
```

```
using namespace std;
```

```
class plant{
```

```
protected :
```

```
int statustumbuh;
```

```
int jumlahair;
```

```
int jumlahpupuk;
```

public :

```
    plant (){  
        statustumbuh = 0;  
        jumlahhair = 0;  
        jumlahpupuk = 0;  
    }  
    void tumbuh(){  
        if(statustumbuh < 4){  
            jumlahhair = jumlahhair - 3;  
            jumlahpupuk = jumlahpupuk - 1;  
            statustumbuh++;  
        }  
    }  
    void beriair(){  
        jumlahhair++;  
    }  
    void beripupuk(){  
        jumlahpupuk++;  
    }  
    void displayplant(){
```

```

        cout<<"\nStatus pertumbuhan = "<<pertumbuhan()<<endl;

        cout<<"Jumlah air  = "<<jumlahair<<endl;

        cout<<"Jumlah pupuk = "<<jumlahpupuk<<endl;

    }

    string pertumbuhan(){

        switch (statustumbuh){

            case 0:

                return "Benih";

                break;

            case 1:

                return "Tunas";

                break;

            case 2:

                return "Tanaman Kecil";

                break;

            case 3:

                return "Tanaman Dewasa";

                break;

        }

        return "Berbunga";

    }

    int getstatustumbuh(){

        return statustumbuh;

```

```

        }

};

class Anggrek : public plant{

private :

    string jenis;

public :

    Anggrek (){

        plant();

        jenis = "Anggrek";

    }

    void cekkondisitumbuh(){

        if(jumlahair >= 3 && jumlahpupuk >= 2){

            cout<<"Anggrek tumbuh "<<endl;

            tumbuh();

        }

        else{

            cout<<"jumlah air Anggrek  = "<<jumlahair<<endl;

            cout<<"jumlah pupuk Anggrek = "<<jumlahpupuk<<endl;

        }

    }

    void tumbuh(){

```

```

        if(statustumbuh < 4){

            jumlahhair  = jumlahhair - 3;

            jumlahpupuk = jumlahpupuk - 2;

            statustumbuh++;

        }

    }

    string getjenis(){

        return jenis;

    }

};

```

```

class Mawar : public plant{

    private :

        string jenis;

    public :

        Mawar (){

            plant();

            jenis = "Mawar";

        }

    void cekkondisitumbuh(){

        if(jumlahhair >= 2 && jumlahpupuk >= 2){

```

```

        cout<<"Mawar tumbuh "<<endl;

        tumbuh();

    }

    else{

        cout<<"jumlah air Mawar  = "<<jumlahair<<endl;

        cout<<"jumlah pupuk Mawar = "<<jumlahpupuk<<endl;

    }

}

void tumbuh(){

    if(statustumbuh < 4){

        jumlahair  = jumlahair - 2;

        jumlahpupuk = jumlahpupuk - 2;

        statustumbuh++;

    }

}

string getjenis(){

    return jenis;

}

};

class Melati : public plant{

    private :

```



```
string jenis;
```

```
public :
```

```
    Melati (){
```

```
        plant();
```

```
        jenis = "Melati";
```

```
    }
```

```
void cekkondisitumbuh(){
```

```
    if(jumlahair >= 1 && jumlahpupuk >= 2){
```

```
        cout<<"Melati tumbuh "<<endl;
```

```
        tumbuh();
```

```
    }
```

```
    else{
```

```
        cout<<"jumlah air Melati  = "<<jumlahair<<endl;
```

```
        cout<<"jumlah pupuk Melati = "<<jumlahpupuk<<endl;
```

```
    }
```

```
}
```

```
void tumbuh(){
```

```
    if(statustumbuh < 4){
```

```
        jumlahair  = jumlahair - 1;
```

```
        jumlahpupuk = jumlahpupuk - 2;
```

```
        statustumbuh++;
```

```
    }
```

```

        }

string getjenis(){

    return jenis;

}

};

class Lili : public plant{

private :

    string jenis;

public :

    Lili (){

        plant();

        jenis = "Lili";

    }

void cekkondisitumbuh(){

    if(jumlahair >= 1 && jumlahpupuk >= 1){

        cout<<"Lili tumbuh "<<endl;

        tumbuh();

    }

    else{

        cout<<"jumlah air Lili  = "<<jumlahair<<endl;

```

```

        cout<<"jumlah pupuk Lili = "<<jumlahpupuk<<endl;

    }

}

void tumbuh(){

    if(statustumbuh < 4){

        jumlahair  = jumlahair - 1;

        jumlahpupuk = jumlahpupuk - 1;

        statustumbuh++;

    }

}

string getjenis(){

    return jenis;

}

};

```

```

class taman : public Anggrek, public Mawar, public Melati, public Lili{

    protected :

        int ukuran;

        int tanaman;

        int panen;

        vector<plant> t;

```

```
vector<Anggrek> a;
```

```
vector<Mawar> m;
```

```
vector<Melati> e;
```

```
vector<Lili> o;
```

```
public :
```

```
taman (){
```

```
    ukuran = 10;
```

```
    tanaman = 0;
```

```
    panen = 0;
```

```
}
```

```
bool addanggrek(Anggrek l){
```

```
    if (tanaman < ukuran ){
```

```
        a.push_back(l);
```

```
        t.push_back(l);
```

```
        cout << "menambahkan Anggrek\n";
```

```
        tanaman++;
```

```
        return true;
```

```
    }
```

```
    else{
```

```
        return false;
```

```
    }
```

```
}
```

```
bool addmawar(Mawar l){  
    if (tanaman < ukuran ){  
        m.push_back(l);  
        t.push_back(l);  
        cout << "menambahkan Mawar\n";  
        tanaman++;  
        return true;  
    }  
    else{  
        return false;  
    }  
}
```

```
bool addmelati(Melati l){  
    if (tanaman < ukuran ){  
        e.push_back(l);  
        t.push_back(l);  
        cout << "menambahkan Melati\n";  
        tanaman++;  
        return true;  
    }  
    else{  
        return false;  
    }  
}
```

```

}

bool addlili(Lili l){

    if (tanaman < ukuran ){

        o.push_back(l);

        t.push_back(l);

        cout << "menambahkan Lili\n";

        tanaman++;

        return true;

    }

    else{

        return false;

    }

}

void airAnggrek(){

    for (int i = 0; i < a.size(); i++){

        a[i].beriair();

        a[i].cekkondisitumbuh();

    }

}

void airMawar(){

    for (int i = 0; i < m.size(); i++){

        m[i].beriair();

```

```

        m[i].cekkondisitumbuh();

    }

}

void airMelati(){

    for (int i = 0; i < e.size(); i++){

        e[i].beriair();

        e[i].cekkondisitumbuh();

    }

}

void airLili(){

    for (int i = 0; i < o.size(); i++){

        o[i].beriair();

        o[i].cekkondisitumbuh();

    }

}

void pupukAnggrek(){

    for (int i = 0; i < a.size(); i++){

        a[i].beripupuk();

        a[i].cekkondisitumbuh();

    }

}

```

```

    }

    void pupukMawar(){

        for (int i = 0; i < m.size(); i++){

            m[i].beripupuk();

            m[i].cekkondisitumbuh();

        }

    }

    void pupukMelati(){

        for (int i = 0; i < e.size(); i++){

            e[i].beripupuk();

            e[i].cekkondisitumbuh();

        }

    }

    void pupukLili(){

        for (int i = 0; i < o.size(); i++){

            o[i].beripupuk();

            o[i].cekkondisitumbuh();

        }

    }

};

```

```

int main(){

    taman t;

```


Anggrek a;

Mawar m;

Melati e;

Lili o;

int inp = 0;

do{

cout<<"\n";

cout << "-----"<<endl;

cout << " Green Garden "<<endl;

cout << "-----"<<endl;

cout << "Silahkan menambahkan tumbuhan terlebih dahulu"<<endl<<endl;

cout << "1. menambahkan plant"<<endl;

cout << "2. beri Anggrek air"<<endl;

cout << "3. beri Anggrek pupuk"<<endl;

cout << "4. beri Mawar air"<<endl;

cout << "5. beri Mawar pupuk"<<endl;

cout << "6. beri Melati air"<<endl;

cout << "7. beri Melati pupuk"<<endl;

cout << "8. beri Lili air"<<endl;

cout << "9. beri Lili pupuk"<<endl;

cout << "999. keluar"<<endl;

```

cout<<"Masukan pilihan = ";cin>>inp;

switch(inp){

    case 1:

        int pil;

        cout<<"1. Anggrek"<<endl;

        cout<<"2. Mawar"<<endl;

        cout<<"3. Melati"<<endl;

        cout<<"4. Lili"<<endl;

        cout<<"Masukkan = ";cin>>pil;

        if(pil == 1){

            t.addanggrek(a);

        }

        else if(pil == 2){

            t.addmawar(m);

        }

        else if(pil == 3){

            t.addmelati(e);

        }

        else if(pil == 4){

            t.addlili(o);

        }

        break;

    case 2:

```

```
        t.airAnggrek();  
  
    break;  
  
    case 3:  
  
        t.pupukAnggrek();  
  
    break;  
  
    case 4:  
  
        t.airMawar();  
  
    break;  
  
    case 5:  
  
        t.pupukMawar();  
  
    break;  
  
    case 6:  
  
        t.airMelati();  
  
    break;  
  
    case 7:  
  
        t.pupukMelati();  
  
    break;  
  
    case 8:  
  
        t.airLili();  
  
    break;  
  
    case 9:  
  
        t.pupukLili();  
  
    break;
```

```
    }  
    }while (inp!=999);  
    return 0;  
}
```