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QUESTION # 01

```cpp
# include <iosTream>
Using name space std;
Class cat{
    Private:
int color;
float weight, height;
Public:
    cat (){
        color=0; weight=0.0; height = 0.0;
    }
    cat (int clr, float wht, float ht){
        color = clr;
        weight = wht;
        height = ht;
    }
Void set (int cls, float wht, float ht){
        color = cls;
        weight = wht;
        height = ht;
    }
    int get color (){
        cout << "enter color of cat :"<<end1;
        cin >> color;
```

```cpp
}
float get weight() {
    cout << "enter weight of cat:" << endl;
    cin >> weight;
}
float get height() {
    cout << "enter height of cat:" << endl;
    cin >> height;
}
void input() {
    cout << "enter colar of cat:" << endl;
    cin >> color;
    cout << "enter weight of cat:" << endl;
    cin >> weight;
    cout << "enter height of cat:" << endl;
    cin >> height; }
void display() {
    cout << "enter colour of cat:" << endl;
    cout << "enter weight of cat:" << endl;
    cout << "enter height of cat:" << endl;
}
int };
int main() {
    cat a(4,55,77);
    cat b;
    b.input();
```

```cpp
cout << endl;
a.display();
cout << endl;
b.display();
}
```

QUESTION #02

```cpp
# include <iostream>
using namespace std;
class building
{
Private:
        long area;
        String address;
        int floors;
Public:
        // Constructor
        Building (long, String, int);
        long get area ();
        String get address ();
        int getfloors();

        void set Area (long);
        void set Address (String);
        void set Floors (int);
};
class Domestic : Public Building {
Private:
    int roomsOnAfloor;
Public:
```

```cpp
        Domestic(int);
            int getRoomsOnAFloor();
            Void setRooms on AFloor(int);
    };
    class commercial : public Building {
Private:
        long monthly lease();
        Void setMonthlylease(long);
    };
    class Factories : Public Building {
    Private:
        int Stores;
        int Units;
    Public:
        Void setStores(int);
        Void set Units(int);
        int getStores();
        int get Units();
    }
```

```
+---------------------------+
|        Building           |
+---------------------------+
|  long  area;              |
|  string  Address;         |
|  int     floors;          |
+---------------------------+
        ↑        ↑        ↖

+----------------+   +------------------+   +------------------+
|  Domestic      |   |  Commercial      |   |  Factories.      |
+----------------+   +------------------+   +------------------+
|  Rooms.        |   |  Area (sqft)     |   |  int stores;     |
|  floor.        |   |  location (Add). |   |  int units;      |
|                |   |                  |   |     rooms        |
|                |   |                  |   |     halls        |
+----------------+   +------------------+   +------------------+
```