

```
/*C++ program to demonstrate example of hierarchical inheritance  
to get square and cube of a number.*/
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```
#include <iostream>  
using namespace std;
```

```
class Number  
{  
    private:  
        int num;  
    public:  
        void getNumber(void)  
        {  
            cout << "Enter an integer number: ";  
            cin >> num;  
        }  
        //to return num  
        int returnNumber(void)  
        { return num; }  
};
```

```
//Base Class 1, to calculate square of a number  
class Square:public Number  
{  
    public:  
    int getSquare(void)  
    {  
        int num,sqr;  
        num=returnNumber(); //get number from class Number  
        sqr=num*num;  
        return sqr;  
    }  
};
```

```
//Base Class 2, to calculate cube of a number  
class Cube:public Number  
{  
    private:  
  
    public:  
    int getCube(void)  
    {  
        int num,cube;  
        num=returnNumber(); //get number from class Number
```

```
        cube=num*num*num;
        return cube;
    }
};
int main()
{
    Square objS;
    Cube objC;
    int sqr,cube;

    objS.getNumber();
    sqr=objS.getSquare();
    cout << "Square of "<< objS.returnNumber() << " is: " << sqr << endl;

    objC.getNumber();
    cube=objC.getCube();
    cout << "Cube  of "<< objS.returnNumber() << " is: " << cube << endl;

    return 0;
}
```