Q4 WAP to find implement shallow and deep copies.

```
//Shallow Copy
#include <iostream>

using namespace std;



class box {

private:

    int length;

    int breadth;

    int height;



public:
```

```
void set_dimensions(int length1, int breadth1,
                    int height1)
{
    length = length1;
    breadth = breadth1;
    height = height1;
}


void show_data()
{
    cout << " Length = " << length
         << "\n Breadth = " << breadth
         << "\n Height = " << height
```

```
            << endl;

    }
};



int main()
{

    box B1, B3;


    B1.set_dimensions(16,12, 18);

    B1.show_data();
```

```
class box {




    box B2 = B1;

    B2.show_data();



    B3 = B1;

    B3.show_data();



    return 0;
}
//DEEP COPY
include <iostream>

using namespace std;



class box {
```

```
private:
    int length;
    int* breadth;
    int height;

public:

    box()
    {
        breadth = new int;
    }
```

```
void set_dimension(int len, int brea,
           int heig)
{
    length = len;
    *breadth = brea;
    height = heig;
}


void show_data()
{
    cout << " Length = " << length
```

```
         << "\n Breadth = " << *breadth

         << "\n Height = " << height

         << endl;

}



box(box& sample)

{

    length = sample.length;

    breadth = new int;

    *breadth = *(sample.breadth);

    height = sample.height;

}
```

```
    ~box()

    {

        delete breadth;

    }
};



int main()
{


    box first;
    first.set_dimension(12, 14, 16);

    first.show_data();

    box second = first;

    second.show_data();

    return 0;
}
```