//code for 5.25 virtual functions

#include <iostream>

using namespace std;

// Abstract base class

class Invoice

{

public:

float sub\_total;

void get\_sub()

{

cin >> sub\_total;

}

//Virtual Function

virtual float do\_math() = 0;

};

class Discount : public Invoice

{

public:

float do\_math()

{ //.10% discount

return (sub\_total \* 1 - (sub\_total \* .10));

}

};

class No\_discount : public Invoice {

public:

float do\_math()

{

return sub\_total \* 1;

}

};

int main()

{

Discount d;

No\_discount n;

cout << "Enter subtotal for discount: \n";

d.get\_sub();

cout << "Discount amount is: " << d.do\_math() << endl;

cout << "Enter subtotal for no discount: ";

n.get\_sub();

cout << "No Discount cost is: " <<n.do\_math() << endl;

return 0;

}