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## Sub : ADS Lab

## Source code :

```
#include<iostream>
using namespace std;
const int SIZE = 3;
class stationery {
private:
  float wholesaleprice;
  float mrp;
  float offerprice;
  int quantity[SIZE];
public:
  stationery(){
    wholesaleprice = 0;
    mrp = 0;
    offerprice = 0;
    int i;
    for(i=0; i<SIZE; i++){
      quantity[i] = i+1;
    }
}
    void  operator[](int i) {
      if( i>SIZE ) {
        cout<<"Invalid Element"<<endl;
        return;
      }
```

```
    cout << quantity[i-1];
}
  stationery(float w,float m,float o){
    wholesaleprice = quantity[0]=w;
    mrp = quantity[1]=m;
    offerprice =quantity[2]= o;

}
stationery operator--() {
      wholesaleprice--;
      mrp--;
      offerprice--;
      return stationery(wholesaleprice, mrp, offerprice);
}
stationery operator++() {
      wholesaleprice++;
      mrp++;
      offerprice++;
      return stationery(wholesaleprice, mrp, offerprice);
}

friend stationery operator+(stationery s1,stationery s2);
friend ostream &operator<<( ostream &output, stationery &s);
friend istream &operator>>( istream  &input, stationery &s);
void display() {
    cout <<"Wholesaleprice :" <<wholesaleprice <<"\n" <<"MRP :" <<mrp <<"\n" <<"Offerprice :"
<<offerprice <<endl;
}
stationery operator()(float x, float y, float z) {
    stationery s;
    s.wholesaleprice = x + z - 5.00;
```

```
    s.mrp = y + z - 5.00;
    s.offerprice = x + y - 5.00;
    return s;
}

};
stationery operator+(stationery s1,stationery s2) {
    stationery price;
    price.wholesaleprice = s1.wholesaleprice + s2.wholesaleprice;
    price.mrp = s1.mrp + s2.mrp;
    price.offerprice = s1.offerprice + s2.offerprice;
    return price;
}
ostream &operator<<( ostream &output, stationery &s) {
    output <<"Wholesaleprice :" <<s.wholesaleprice <<"\n" <<"MRP :" <<s.mrp <<"\n" <<"Offerprice
:" <<s.offerprice <<endl;
    return output;
}
istream &operator>>( istream  &input, stationery &s) {
    input >>s.wholesaleprice >>s.mrp >>s.offerprice;
    return input;
}

int main() {

stationery s1(15.00,25.00,20.00);
stationery s2(40.00,55.00,50.00);
stationery s3,s4;
stationery s5(25.00,45.00,40.00),s6;
--s1;
 s1.display();
```

```
 s1[2];
--s2;
s2.display();
++s1;
s1.display();
++s2;
s2.display();
cout<<"\n"<<"S3 :"<<endl;
s3 = s1+s2;
s3.display();
cout<<"\n"<<"S4 :"<<endl;
cin>>s4;
cout<<s4;
cout<<"\n"<<"S5 :"<<endl;
s5.display();
s6 = s5(10.00,10.00,10.00);
cout<<"\n"<<"S6 :"<<endl;
s6.display();
cout <<"\n"<< "Value of A[2] : " ;
s1[2];
cout <<endl<<"Value of A[5] : " ;
s1[5];
cout<<"Value of A[12] : " ;
s1[12];
getchar();
return 0;
}
```

## Output :

```
/tmp/im6QL3Roqy.o
Wholesaleprice :14
MRP :24
Offerprice :19
25Wholesaleprice :39
MRP :54
Offerprice :49
Wholesaleprice :15
MRP :25
Offerprice :20
Wholesaleprice :40
MRP :55
Offerprice :50

S3 :
Wholesaleprice :55
MRP :80
Offerprice :70

S4 :
25
40
35
Wholesaleprice :25
MRP :40
Offerprice :35

S5 :
Wholesaleprice :25
MRP :45
Offerprice :40

S6 :
Wholesaleprice :15
MRP :15
Offerprice :15

Value of A[2] : 25
Value of A[5] : Invalid Element
Value of A[12] : Invalid Element
```