

```

class C {
public:
    C(): size(1), a(new int[1]) {a[0]=0;}
    C& operator=(const C& x) {

        if(this!=&x){
            size=x.size;
            a=new int[size];
            for(int i=0;i<size;i++) a[i]=x.a[i];
        }
        return *this;
    }
    void add(int k) {
        int *b=a;
        a=new int[size+1];
        ++size;
        a[0]=k;
        for(int i=1;i<size;i++) a[i]=b[i-1];
        delete[] b;
    }
    int& operator[](int i) const {return a[i];}
    void stampa() const {
        for(int i=0;i<size;i++) cout<<a[i]<< ' ';
    }
    ~C() {stampa(); cout<<"~C "; delete[] a;}
private:
    int size;
    int* a;
};

```

```

main(){
    C v; v.add(1);
    C w=v; w[1]=2;
    v.stampa(); cout<<"UNO\n";
    w.stampa(); cout<<"DUE\n";
    C* p=new C; p->add(3);
    *p=v;
    (*p)[0]=4; v[1]=5;
    v.stampa(); cout<<"TRE\n";
    w.stampa(); cout<<"QUATTRO\n";
    p->stampa(); cout<<"CINQUE\n";
    w=*p;
    w[1]=6; v[0]=7;
    v.stampa(); cout<<"SEI\n";
    w.stampa(); cout<<"SETTE\n";
    p->stampa(); cout<<"OTTO\n";
    delete p; cout<<"NOVE\n";
}

```

Soluzione

1 2 UNO

1 2 DUE

1 5 TRE

1 5 QUATTRO

4 2 CINQUE

7 5 SEI

4 6 SETTE

4 2 OTTO

4 2 ~C NOVE

4 6 ~C 7 5 ~C