

mutable.cpp

```
#include <iostream>
using namespace std;

class Date {
public:
    Date(int mn=12,int dy=31,int yr=1999):month(mn),year(yr),
                                           day(dy) {
        cout<<"Konstruktor Date"<<endl;
        cout<<"Tag  ="<<day<<endl;
        cout<<"Monat="<<month<<endl;
        cout<<"Jahr ="<<year<<'\n'<<endl;
    }

    ~Date(){ cout<<"Destruktor Date"<<endl; }

    int getMonth() const;    // A read-only function
    void setMonth( int mn ); // A write function cannot be const
    int getYear() const;
    void setYear( int yr) const; // const write function

private:
    int day;
    int month;
    mutable int year; // mutable: assign by const funct. allowed
};

int Date::getMonth() const { // const function
    return month;           // Doesn't modify anything
}

int Date::getYear() const { // const function
    return year;           // Doesn't modify anything
}

void Date::setMonth( int mn ) {
    month = mn;            // Modifies data member
}

void Date::setYear(int yr) const { // const memberfunction
    year = yr;             // OK: modifies a mutable data member
    cout<<"Monat="<<month<<endl;
    cout<<"Jahr ="<<year<<'\n'<<endl;
    // month=12; // Error: modifies a non-mutable data member
    // int i=setMonth(month); // Error
}
```

mutable.cpp

```
void main() {  
    const Date t1;  
    t1.setYear(2000);  
    // t1.setMonth(1);    // Error  
    cout<<"Monat = "<<t1.getMonth()<<endl;  
    cout<<"Jahr  = "<<t1.getYear()<<endl;  
    cin.get();  
}
```