C++语言实例代码：

判断是否为闰年：

date.h:

#include<iostream>

using namespace std;

class date

{

private:

int year;

int month;

int day;

public:

date();

date(int,int,int);

~date();

void setYear(int y);

void getYear();

void setMonth(int m);

void getMonth();

void setDay(int d);

void getDay();

void getTomorrow();

void getYesterday();

void printCalendar();

void displayChineseDate();

void displayAmericaDate();

void isLeapYear();

int numbersOfWeek();

void xingqiji();

int runnian(int r);

};

Main.cpp:

#include"date.h"

date::date()

{

date::date(int y,int m,int d)

}

{

year=y;

month=m;

day=d;

}

{

date::~date()

}

void date::setYear(int y)

{

year=y;

}

void date::getYear()

{

cout<<year<<endl;

}

void date::setMonth(int m)

{

if(m>12||m<1)

{

cout<<"月份不属于1-12之间！"<<endl;

exit(0);

}

month=m;

}

void date::getMonth()

{

cout<<month<<endl;

}

void date::setDay(int d)

{

int a[12]={31,28,31,30,31,30,31,31,30,31,30,31};

if(runnian(year)==1)

a[1]+=1;

if(day>a[month-1]||day<1)

{

cout<<"日数应在1-"<<a[month-1]<<"之间！"<<endl;

exit(0);

}

day=d;

}

void date::getDay()

{

cout<<day<<endl;

}

void date::getTomorrow()

{

day+=1;

}

void date::getYesterday()

{

day-=1;

}

void date::printCalendar()

{

int i,j,a[12]={31,28,31,30,31,30,31,31,30,31,30,31};

cout<<"Sun"<<"\t"<<"Mon"<<"\t"<<"Tue"<<"\t"<<"Wed"<<"\t"<<"Thu"<<"\t"<<"Fri"<<"\t"<<"Sat"<<endl;

i=numbersOfWeek();

j=i-(day-1)%7;

if(j<=0)

j+=7;

if(runnian(year)==1)

a[1]+=1;

if(j!=7)

for(i=0;i<j;i++)

{

cout<<i+1<<"\t";

if((i+j+1)%7==0)

cout<<endl;

}

cout<<endl;

}

void date::displayChineseDate()

{

cout<<year<<"年"<<month<<"月"<<day<<"日"<<endl;

}

void date::displayAmericaDate()

{

char a[12][30]={"January","February","March","April","May","June","July","Augest","September","October","Noveber","December"};

cout<<a[month-1]<<","<<day<<","<<year<<endl;

}

int date::runnian(int r)

{

if((r%4==0&&r%100!=0)||r%400==0)

return 1;

else

return 0;

}

void date::isLeapYear()

{

if(runnian(year)==1)

cout<<year<<"是闰年"<<endl;

else

cout<<year<<"不是闰年"<<endl;

}

int date::numbersOfWeek()

{

int i,j,t=0,a[12]={31,28,31,30,31,30,31,31,30,31,30,31};

if(year>200)

{

for(i=2000;i<year;i++)

{

if(runnian(i)==0)

t+=365;

else

t+=366;

}

if(month>1)

for(i=0;i<month-1;i++)

t+=a[i];

if(month>2&&runnian(year)==1)

t+=1;

t+=day;

j=(t-2)%7;

if(j==0)

return (7);

else

return (j);

}

else if(year==2000)

{

if(month>1)

for(i=0;i<month-1;i++)

t+=a[i];

if(month>2&&runnian(year)==1)

t+=1;

t+=day;

j=(t-2)%7;

if(j==0)

return (7);

else

return(j);

}

else if(year==2000,month==1,day==1)

return (6);

else if(year<2000)

{

for(i=year;i<2000;i++)

{

if(runnian(i)==0)

t+=365;

else

t+=366;

}

if(month>1)

for(i=0;i<month-1;i++)

t-=a[i];

if(month>2&&runnian(year)==1)

t-=1;

t-=day;

j=(t-4)%7;

if(j==0)

return (7);

else

return (j);

}

}

void date::xingqiji()

{

char a[7][5]={"一","二","三","四","五","六","日"};

cout<<year<<"年"<<month<<"月"<<day<<"日 是星期"<<a[numbersOfWeek()-1]<<endl;

}

Test.cpp:

int main()

{

date d1(2014,4,21);

d1.printCalendar();

d1.displayChineseDate();

d1.displayAmericaDate();

d1.isLeapYear();

d1.xingqiji();

return 0;

}