```
/***************************Name:- Divesh Uttamchandani*********************/
/******Class :- XII A
/****************************Date :- 07 July 2014
#include<iostream.h>
#include<conio.h>
#includeprocess.h>
class date
private:
 int mm,dd,yyyy;
 int check leap(int yyyy);
 int days in month(int mm,int yyyy);
 int check valid(int dd,int mm,int yyyy);
 int abs(int a);
public:
 void enter();
 void display();
 date newdate(date,int);
int date::check leap(int yyyy)
 if(yyyy%4==0&&yyyy%100!=0||yyyy%400==0)
    return 1;
 else
    return 0;
//.....//
int date::days in month(int mm,int yyyy)
 switch(mm)
 case 2:
     if(check_leap(yyyy)==1) //if year is leap
        return 29;
     else
        return 28;
 case 4:
 case 6:
 case 9:
 case 11: return 30;
 default: return 31;
```

```
//.....//
int date::check valid(int dd,int mm,int yyyy)
 int flag=0;
 if(yyyy>0)
 if(mm>0&&mm<=12)
  if(dd>0&&dd<=days_in_month(mm,yyyy))
  flag=1;
 return flag;
}
//.....//
int date::abs(int a)
{
 if(a<0)
    a=-1*a;
 return a;
                                                          //
void date::enter()
 cout<<"\nenter date(dd)\t\t"; cin>>dd;
 cout<<"enter month(mm)\t\t"; cin>>mm;
 cout<<"enter year(yyyy)\t"; cin>>yyyy;
//.....//
void date::display()
 cout << dd << "/" << mm << "/" << yyyy;
```

```
//Function To Add Days//
date date::newdate(date dt,int days add)
date new dt;
new dt=dt;
if(check_valid(dt.dd,dt.mm,dt.yyyy)==1) //if date entered is valid
if(days add<0)
       for(int i=1;i \le abs(days add);i++)
         new dt.dd--;
         if(new_dt.dd<1)
         new dt.mm--;
         if(new_dt.mm<1)
                new dt.mm=12;
                new dt.yyyy--;
              new_dt.dd=days_in_month(new_dt.mm,new_dt.yyyy);
if(days_add>0)
       for(int i=1;i<=abs(days add);i++)
              new dt.dd++;
              if(new dt.dd>days in month(new dt.mm,new dt.yyyy))
                     new dt.dd=1;
                     new dt.mm++;
                       if(new dt.mm>12)
                              new dt.mm=1;
                              new dt.yyyy++;
}
else
       cout << "\ninvalid date press any key to exit";
       getch();
       exit(0);
return new dt;
```

## Output

```
Enter Date

enter date(dd) 22
enter month(mm) 14
enter year(yyyy) 2014

Enter Days To Be Added Or Subtracted 11
invalid date press any key to exit_
```

```
Enter Date

enter date(dd) 22
enter month(mm) 12
enter year(yyyy) 2014

Enter Days To Be Added Or Subtracted 111
Your new date is 12/4/2015_
```