**/\* Program to check validity of date using structures. \*/**

#include<iostream.h>

#include<process.h>

#include<dos.h>

#include<conio.h>

int d31[]={1,3,5,7,8,10,12};

int d30[]={4,6,9,11,4,6};

int flag=0;

int i;

struct date\_ { int dd,mm,yy;

} d;

void date\_validity(date\_ d)

{

if(d.dd>0&&d.dd<=31)

{

if (d.mm>0&&d.mm<=12)

{

if(d.yy)

{

if(d.mm==2)//feb check

{

if (d.dd>0&&d.dd<=28)

{

cout<<"Date "<<d.dd<<"/"<<d.mm<<"/"<<d.yy<<" is valid.";

}

else if( (d.yy%400==0) || (d.yy%100!=0&&d.yy%4=00) )//leap check

{

if(d.dd>0&&d.dd<=29)

cout<<"Date "<<d.dd<<"/"<<d.mm<<"/"<<d.yy<<" is valid.";

}//end of leap check

else

cout<<"Date "<<d.dd<<"/"<<d.mm<<"/"<<d.yy<<" is INVALID. In Leap “

<<” year February has maximum of 29 days.";

getch();

exit(0);

}// end of feb check

else

{

for(i=0; i<7; i++)//for loop beginning

{

flag=0;

if(d.dd<31)

{

if(d.mm==d30[i])

{

cout<<"Date "<<d.dd<<"/"<<d.mm<<"/"<<d.yy<<" is valid."; getch();exit(0);

flag=1;

break;

}

}

else

if(d.mm==d31[i])

{

flag=2;

cout<<"Date "<<d.dd<<"/"<<d.mm<<"/"<<d.yy<<" is valid."; getch();exit(0);

}

}//end of for loop

if(flag==0)

{

cout<<"Date "<<d.dd<<"/"<<d.mm<<"/"<<d.yy<<" is INVALID. Check month.";

getch();

exit(0);

}

}//end of else block

}//end of d.yy check block

else

cout<<"Date "<<d.dd<<"/"<<d.mm<<"/"<<d.yy<<" is INVALID. Check year."; getch();exit(0);

}//end of d.mm check block

else

cout<<"Date "<<d.dd<<"/"<<d.mm<<"/"<<d.yy<<" is INVALID. Check month."; getch();exit(0);

}//end of d.dd block

else

cout<<"Date "<<d.dd<<"/"<<d.mm<<"/"<<d.yy<<" is INVALID. Check day."; getch();exit(0);

}

void main()

{clrscr();

cout<<"-------------------------------\* Date Checking \*--------------------------------\n\n";

cout<<"Enter day of date : ";

cin>>d.dd;

cout<<"\n\nEnter month of date : ";

cin>>d.mm;

cout<<"\n\nEnter year of date : ";

cin>>d.yy;

cout<<"\n\n\n\t\t\tChecking validity of date.\n\n";

delay(1000);

cout<<"\n\n";

date\_validity(d);

getch();

}