

PRACTICAL:18

AIM: Create a class to find out whether the given year is leap year or not. (Use inheritance for this program).

PROGRAM:

```
import java.util.Scanner;

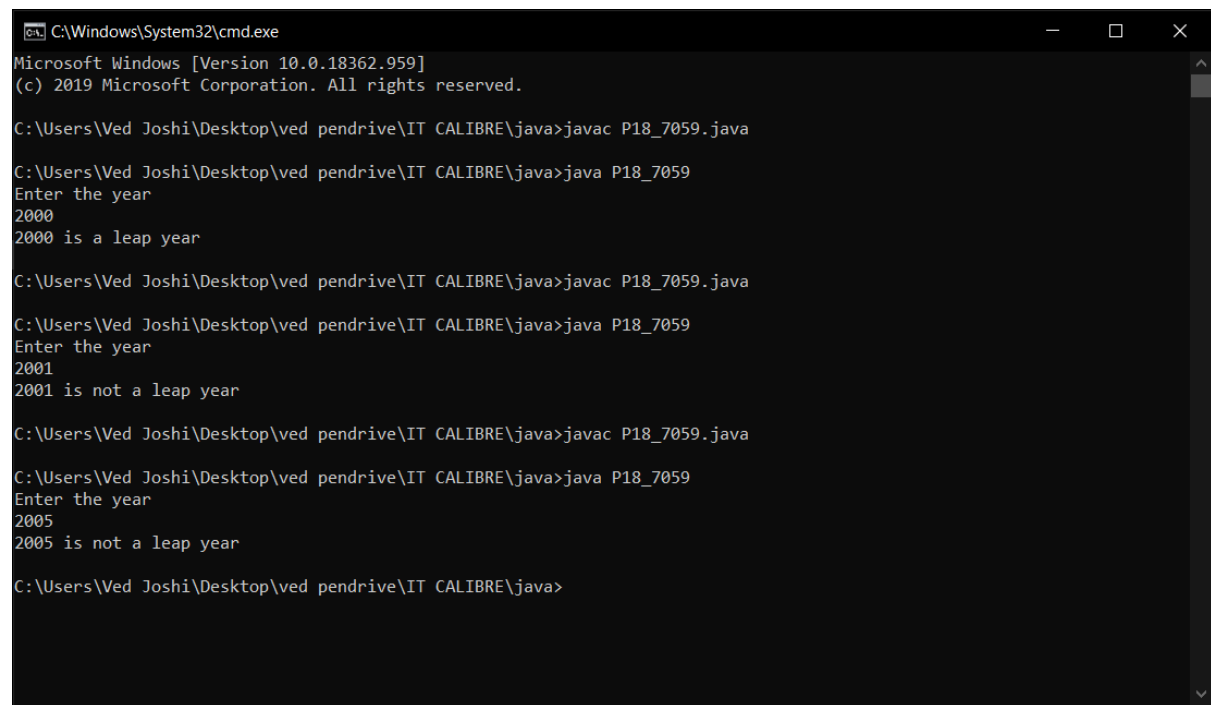
abstract class LeapYear
{
    abstract void check(int year);
}

class Calculate extends LeapYear
{
    int temp = 0;
    int year;
    public void check(int year)
    {
        if(year%4==0)
        {
            if(year%100==0)
            {
                if(year%400==0)
                {
                    temp=1;
                }
                else
                {
                    temp=0;
                }
            }
            else
            temp=1;
        }
    }
}
```

```
        {
            temp=1;
        }
    }
    else
    {
        temp=0;
    }
    if(temp==0)
    {
        System.out.println(year+" is not a leap year");
    }
    else
    {
        System.out.println(year+" is a leap year");
    }
}

}

class P18_7059
{
    public static void main(String args[])
    {
        Scanner sc= new Scanner(System.in);
        Calculate c1=new Calculate();
        int myyear;
        System.out.println("Enter the year");
        myyear=sc.nextInt();
        c1.check(myyear);
    }
}
```

OUTPUT:

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.18362.959]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\Ved Joshi\Desktop\ved pendrive\IT CALIBRE\java>javac P18_7059.java

C:\Users\Ved Joshi\Desktop\ved pendrive\IT CALIBRE\java>java P18_7059
Enter the year
2000
2000 is a leap year

C:\Users\Ved Joshi\Desktop\ved pendrive\IT CALIBRE\java>javac P18_7059.java

C:\Users\Ved Joshi\Desktop\ved pendrive\IT CALIBRE\java>java P18_7059
Enter the year
2001
2001 is not a leap year

C:\Users\Ved Joshi\Desktop\ved pendrive\IT CALIBRE\java>javac P18_7059.java

C:\Users\Ved Joshi\Desktop\ved pendrive\IT CALIBRE\java>java P18_7059
Enter the year
2005
2005 is not a leap year

C:\Users\Ved Joshi\Desktop\ved pendrive\IT CALIBRE\java>
```