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Subjet :- DS&BDA

Assignment No 4 :- Locate dataset (e.g., sample_weather.txt) for working on weather data which reads the text input files and finds average for temperature, dew point and wind speed

1.To Read CSV File

```java
import java.io.*;

public class readCsv {
 public static void main(String args[]){

        String line="";
        String splitBy=",";
        try{
            BufferedReader br= new BufferedReader(new
            FileReader("C:\\ronit\\DS&bda\\28-ronit-ass4\\Dataset.csv"));
            while((line = br.readLine()) !=null){
            String [] country = line.split(splitBy);
            System.out.println("Country [Name= "+country[0] + ",
Tempreture=" +country[1] +"Dew_point="+country[2] + ", Wind=" + country[3]
);
              }
        }
        catch (IOException e){
        e.printStackTrace();
        }
     }
 }
```

OUTPUT:-

PS C:\ronit> c:; cd 'c:\ronit'; & 'C:\Program Files\Java\jdk-19\bin\java.exe' '--enable-preview' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\student\AppData\Roaming\Code\User\workspaceStorage\bcaefe7a2554561b32e4bc3091259b87\redhat.java\jdt_ws \ronit_82c68704\bin' 'readCsv'

Country [Name= Name, Tempreture=Roll noDew_point=gender, Wind=AI

Country [Name= Yash, Tempreture=223101Dew_point=male, Wind=25

Country [Name= Prit, Tempreture=223102Dew_point=female, Wind=49

Country [Name= Meet, Tempreture=223103Dew_point=female, Wind=24

Country [Name= Drashti, Tempreture=223104Dew_point=female, Wind=18

Country [Name= Saloni, Tempreture=223105Dew_point=female, Wind=48

Country [Name= Hinal, Tempreture=223106Dew_point=female, Wind=58

Country [Name= Jay, Tempreture=223107Dew_point=male, Wind=48

Country [Name= Darshana, Tempreture=223108Dew_point=female, Wind=14

Country [Name= Hardik, Tempreture=223109Dew_point=male, Wind=86

Country [Name= Janvi, Tempreture=223110Dew_point=female, Wind=28

Country [Name= Ronak, Tempreture=223111Dew_point=male, Wind=74

Country [Name= Naman, Tempreture=223112Dew_point=female, Wind=15

Country [Name= Khyati, Tempreture=223113Dew_point=female, Wind=52

Country [Name= Sikha, Tempreture=223114Dew_point=female, Wind=49

Country [Name= Minal, Tempreture=223115Dew_point=female, Wind=98

Country [Name= Milan, Tempreture=223116Dew_point=female, Wind=79

Country [Name= Kaushik, Tempreture=223117Dew_point=male, Wind=56

Country [Name= Smit, Tempreture=223118Dew_point=male, Wind=51

Country [Name= Ravina, Tempreture=223119Dew_point=female, Wind=88

Country [Name= Priti, Tempreture=223120Dew_point=female, Wind=33

Country [Name= Hetal, Tempreture=223121Dew_point=female, Wind=68

Country [Name= Pooja, Tempreture=223122Dew_point=female, Wind=34

Country [Name= Kishan, Tempreture=223123Dew_point=male, Wind=45

Country [Name= Akshar, Tempreture=223124Dew_point=male, Wind=77

Country [Name= Akshay, Tempreture=223125Dew_point=male, Wind=59

Country [Name= Radhika, Tempreture=223126Dew_point=female, Wind=74

Country [Name= Riya, Tempreture=223127Dew_point=female, Wind=56

Country [Name= Komal, Tempreture=223128Dew_point=female, Wind=13

Country [Name= Mihir, Tempreture=223129Dew_point=male, Wind=62

2.To Calculate Mean Attributes

```java
import java.io.*;

public class calculateMean {
 public static void main(String[] args)
 {
    BufferedReader br = null;
    String line = "";
    String splitBy = ",";
    int sum1=0,sum2=0,sum3=0,count=0;
    try
    {
        br = new BufferedReader(new FileReader("C:\\ronit\\DS&bda\\28-
ronit-ass4\\Datatset(1).csv"));
        br.readLine();
        try
        {
            while ((line = br.readLine()) != null)
            {
                String[] city = line.split(splitBy);
                System.out.println("City [Name=" + city[0] + ",
Temperature=" + city[1] + ", Dew_Point=" +
                city[2] + ", Wind=" + city[3] );
                String[] country = line.split(",");
                int temp=Integer.parseInt(country[1]);
                int dew=Integer.parseInt(country[2]);
                int wind=Integer.parseInt(country[2]);
                sum1=sum1+temp;
                sum2=sum2+dew;
                sum3=sum3+wind;
                count++;
            }
        }
        catch (NumberFormatException | IOException e)
        {
            System.out.println("NA"); e.printStackTrace();
        }
    }
    catch (Exception e)
    {
```

```java
                e.printStackTrace();
        }

        System.out.println("mean of Temperature ="+sum1/count);
        System.out.println("mean of Dew point="+sum2/count);
        System.out.println("mean of Wind ="+sum3/count);
        }
    }
```

Output :-

City [Name=Akola, Temperature=19, Dew_Point=47, Wind=24

City [Name=Nashik, Temperature=38, Dew_Point=25, Wind=43

City [Name=Yavatmal, Temperature=33, Dew_Point=28, Wind=49

City [Name=Amrawati, Temperature=23, Dew_Point=19, Wind=48

City [Name=Buldhana, Temperature=49, Dew_Point=38, Wind=50

City [Name=Satara, Temperature=37, Dew_Point=42, Wind=42

City [Name=Dhule, Temperature=48, Dew_Point=25, Wind=22

City [Name=Latur, Temperature=28, Dew_Point=23, Wind=36

City [Name=Mumbai, Temperature=24, Dew_Point=24, Wind=38

City [Name=Kolhapur, Temperature=50, Dew_Point=25, Wind=49

City [Name=Solapur, Temperature=22, Dew_Point=22, Wind=46

City [Name=Washim, Temperature=48, Dew_Point=43, Wind=46

City [Name=Beed, Temperature=34, Dew_Point=50, Wind=50

City [Name=Jalna, Temperature=47, Dew_Point=46, Wind=33

City [Name=Latur, Temperature=24, Dew_Point=43, Wind=25

City [Name=Nanded, Temperature=16, Dew_Point=31, Wind=15

City [Name=Parbhani, Temperature=30, Dew_Point=38, Wind=43

City [Name=Hingoli, Temperature=21, Dew_Point=18, Wind=28

City [Name=Thane, Temperature=48, Dew_Point=18, Wind=33

mean of Temperature =31

mean of Dew point=30

mean of Wind =30

PS C:\ronit>