

Problem 7—Custom Customer Mailings

Professor Plum's wife runs a small mail-order business. She has a spreadsheet of customer data in a .csv (comma separated values) text-file. The first line contains comma separated column headings with the remaining lines containing customer data one-per-line. The first few lines of this file are:

```
FIRST,MI,LAST,STREETADDRESS,CITY,STATECODE,ZIP,COUNTRY,EMAIL,PHONE,GENDER,BIRTHDAY
Woodrow,C,Wilson,2362 New Street,Eugene,OR,97408,US,Woodrow.C.Wilson@spambob.com,541-337-9453,male,11/26/1984
Eric,A,Stutler,568 Nuzum Court,East Aurora,NY,14052,US,Eric.A.Stutler@trashymail.com,716-652-4943,male,11/24/1947
David,E,Herbert,3678 Seltice Way,Boise,ID,83704,US,David.E.Herbert@spambob.com,208-703-8246,male,2/16/1971
Lee,A,Andrews,3472 Berkshire Circle,Knoxville,TN,37917,US,Lee.A.Andrews@spambob.com,865-566-4125,male,11/15/1973
Rena,D,Adkins,3153 Cardinal Lane,Cleveland Heights,OH,44118,US,Rena.D.Adkins@trashymail.com,216-932-7637,female,1/14/1975
Reyna,R,Brown,2093 Middleville Road,Los Angeles,CA,90014,US,Reyna.R.Brown@pookmail.com,626-388-0030,female,3/20/1942
Duane,E,Hall,3467 Ray Court,WAGRAM,NC,28396,US,Duane.E.Hall@pookmail.com,910-369-3902,male,7/30/1962
...
```

His wife wants to be able to generate custom customer mailing labels which target customers matching a specified query. The query components can be based on gender, state, and/or decade born. A sample query would be:

```
GENDER=male
STATECODE=OR
STATECODE=ID
DECADE=1970
DECADE=1980
DECADE=1960
```

This query's meaning would be all males living in Oregon or Idaho born in the 1960s, 1970s, or 1980s.

The output file should contain a mailing label for each customer satisfying the query. Each mailing label should be in **all upper-case letters** and consist of:

- one blank line to start
- a name line with the first name, a blank space, the last name
- street address line
- the city, a comma, a blank space, the state code, **two blank spaces**, the zip code
- end with a blank line

For the data visible above, the above query would produce the mailing labels:

```
WOODROW WILSON
2362 NEW STREET
EUGENE, OR  97408
```

```
DAVID HERBERT
3678 SELTICE WAY
BOISE, ID  83704
```

INPUT SPECIFICATION

The input will start with a query (one or more lines for the query), a **blank line**, and finally the customer (.csv) data.

OUTPUT SPECIFICATION

The output should contain the mailing labels for each customer satisfying the query. The mailing labels should be in the same order that the corresponding customers appeared in the (.csv) data.

SAMPLE INPUT

GENDER=female
 GENDER=male
 STATECODE=MN
 STATECODE=IA
 DECADE=1980
 DECADE=1950

FIRST,MI,LAST,STREETADDRESS,CITY,STATECODE,ZIP,COUNTRY,EMAIL,PHONE,GENDER,BIRTHDAY
 Woodrow,C,Wilson,2362 New Street,Eugene,OR,97408,US,Woodrow.C.Wilson@spambob.com,541-337-9453,male,11/26/1984
 Eric,A,Stutler,568 Nuzum Court,East Aurora,NY,14052,US,Eric.A.Stutler@trashymail.com,716-652-4943,male,11/24/1947
 David,E,Herbert,3678 Seltice Way,Boise,ID,83704,US,David.E.Herbert@spambob.com,208-703-8246,male,2/16/1971
 Lee,A,Andrews,3472 Berkshire Circle,Knoxville,TN,37917,US,Lee.A.Andrews@spambob.com,865-566-4125,male,11/15/1973
 Rena,D,Adkins,3153 Cardinal Lane,Cleveland Heights,OH,44118,US,Rena.D.Adkins@trashymail.com,216-932-7637,female,1/14/1975
 Reyna,R,Brown,2093 Middleville Road,Los Angeles,CA,90014,US,Reyna.R.Brown@pookmail.com,626-388-0030,female,3/20/1942
 Duane,E,Hall,3467 Ray Court,WAGRAM,NC,28396,US,Duane.E.Hall@pookmail.com,910-369-3902,male,7/30/1962
 Fannie,C,Chapman,1791 Shingleton Road,Bridgman,MI,49106,US,Fannie.C.Chapman@spambob.com,269-465-7477,female,10/5/1961
 Maggie,D,Betts,1972 Twin Willow Lane,Fayetteville,NC,28304,US,Maggie.D.Betts@spambob.com,910-425-9414,female,8/16/1980
 Glenn,M,Stephens,280 Hillcrest Circle,MAPLE PLAIN,MN,55359,US,Glenn.M.Stephens@dodgit.com,763-479-7845,male,7/18/1985
 Eric,T,Sanders,4624 Broadway Street,BLUFFTON,SC,29910,US,Eric.T.Sanders@dodgit.com,843-705-4450,male,9/4/1951
 Stephen,L,Mcknight,4078 White River Way,West Valley City,UT,84119,US,Stephen.L.Mcknight@spambob.com,801-515-8270,male,7/31/1962
 Javier,A,Powers,4920 Lowndes Hill Park Road,Sherman Oaks,CA,91403,US,Javier.A.Powers@dodgit.com,661-351-8863,male,7/5/1982
 Diana,A,Russell,250 Oral Lake Road,NEW MARKET,MN,55054,US,Diana.A.Russell@spambob.com,952-461-5925,female,5/14/1953
 Donna,D,Goodrich,4977 Bastin Drive,Eagleville,PA,19403,US,Donna.D.Goodrich@mailinator.com,484-764-2478,female,4/6/1971
 Jess,H,Franklin,585 Ashford Drive,Mc Lean,VA,22102,US,Jess.H.Franklin@trashymail.com,703-667-1447,male,9/19/1943
 Jason,H,Morin,929 Village View Drive,Fort Myers,FL,33901,US,Jason.H.Morin@pookmail.com,239-846-4951,male,4/26/1970
 Rose,L,Rice,492 Leroy Lane,Watertown,SD,57201,US,Rose.L.Rice@mailinator.com,605-882-6217,female,2/18/1985
 Julia,D,Goble,885 Cherry Camp Road,Chicago,IL,60605,US,Julia.D.Goble@mailinator.com,773-532-8122,female,7/5/1952
 James,D,Drew,4355 Buckhannan Avenue,Syracuse,NY,13202,US,James.D.Drew@spambob.com,315-474-1613,male,4/4/1945
 Duane,A,Aviles,818 Court Street,Saint Louis,MO,63146,US,Duane.A.Aviles@trashymail.com,636-893-4862,male,5/22/1973
 Robert,K,Mullens,3188 Short Street,Georgetown,TX,78626,US,Robert.K.Mullens@mailinator.com,512-942-2285,male,10/7/1960
 Daniel,V,Hearn,1811 Red Hawk Road,MARIETTA,MN,56257,US,Daniel.V.Hearn@mailinator.com,320-668-8346,male,9/19/1982
 Billy,V,Thompson,2095 Mesa Drive,LAS VEGAS,NV,89128,US,Billy.V.Thompson@spambob.com,702-341-5879,male,5/5/1961
 Daniel,D,King,3916 Lodgeville Road,Golden Valley,MN,55427,US,Daniel.D.King@mailinator.com,612-269-7558,male,5/31/1967
 Demetrius,C,Fu,1321 Collins Street,Tampa,FL,33634,US,Demetrius.C.Fu@pookmail.com,813-841-2434,male,3/25/1985
 Clarence,M,Kohler,3638 Marshville Road,Garden City,NY,11530,US,Clarence.M.Kohler@pookmail.com,845-664-2670,male,6/14/1957
 Salvatore,M,Salisbury,395 Hornor Avenue,Tulsa,OK,74120,US,Salvatore.M.Salisbury@pookmail.com,918-329-7031,male,8/14/1968
 Mildred,E,Wade,4760 Layman Avenue,Wilmington,NC,28403,US,Mildred.E.Wade@pookmail.com,910-933-6397,female,6/8/1944
 Rosie,E,Gaunt,4174 Joyce Street,LILLIAN,AL,36542,US,Rosie.E.Gaunt@pookmail.com,251-962-0105,female,1/11/1981
 James,M,Wood,2701 Goldleaf Lane,JERSEY CITY,NJ,07304,US,James.M.Wood@mailinator.com,201-631-5596,male,11/29/1968
 Dolores,J,Charon,4552 Hillside Street,MESA,AZ,85225,US,Dolores.J.Charon@pookmail.com,480-503-3567,female,8/31/1967
 Cora,M,Mcculloch,3462 Mill Street,Saint Petersburg,FL,33716,US,Cora.M.Mcculloch@pookmail.com,863-981-1677,female,8/30/1958
 Peter,N,Underwood,2144 Kildeer Drive,Newport News,VA,23601,US,Peter.N.Underwood@spambob.com,757-240-5459,male,5/15/1961
 Bobbie,J,Quintero,1820 Quincy Street,Philadelphia,PA,19107,US,Bobbie.J.Quintero@trashymail.com,267-555-1272,female,10/3/1977

SAMPLE OUTPUT

<EOLN>
 GLENN STEPHENS<EOLN>
 280 HILLCREST CIRCLE<EOLN>
 MAPLE PLAIN, MN 55359<EOLN>
 <EOLN>
 <EOLN>
 DIANA RUSSELL<EOLN>
 250 ORAL LAKE ROAD<EOLN>
 NEW MARKET, MN 55054<EOLN>
 <EOLN>
 <EOLN>
 DANIEL HEARN<EOLN>
 1811 RED HAWK ROAD<EOLN>
 MARIETTA, MN 56257<EOLN>
 <EOLN>
 <EOF>

←The <EOLN> tag represents the end-of-line, and **should not be printed**.
 ←The <EOF> tag represents the end-of-file, and **should not be printed**.