Exercise 5

1. Develop a program to read the file “Employee.csv”
   A. Sort by column “First Name” in descending order

   Hint: You might need to import csv and operator.

```
['286', 'Schleger', 'Yvonne', '08/04/1978', '31/07/1962', 'B', '76000 ', '
['336', 'Vong', 'William', '14/03/1987', '27/05/1949', 'D', '32000 ', '69
['158', 'Kahn', 'Wendy Beth', '27/09/1977', '19/07/1958', 'D', '39000 ', '
['346', 'Wheeler', 'Wendy', '15/07/1984', '10/09/1957', 'A', '45000 ', '61
['358', 'Yu', 'Wei', '11/03/1997', '01/08/1967', 'E', '99000 ', '51 ']
['181', 'Kuppa', 'Vamsi', '02/03/1997', '28/03/1973', 'E', '72000 ', '45 '
['282', 'Sazanovich', 'Vadim', '06/01/1997', '02/06/1978', 'C', '88000 ',
['41', 'Carlson', 'Ty Loren', '11/10/1988', '07/06/1950', 'D', '42000 ', '
['270', 'Reiter', 'Tsvi Michael', '29/04/1984', '05/06/1972', 'B', '63000
['99', 'Getzinger', 'Tom', '12/09/1992', '15/04/1970', 'D', '94000 ', '48
['100', 'Getzinger', 'Tom', '10/10/1982', '31/08/1975', 'A', '80000 ', '43
['236', 'Nixon', 'Toby', '29/03/1985', '19/04/1973', 'B', '62000 ', '45 ']
['240', "O'Dell", 'Tina Sloane', '18/03/1985', '08/09/1953', 'B', '66000 '
['213', 'Mensa-Annan', 'Tete', '08/01/1996', '14/06/1969', 'E', '68000 ',
['136', 'Hoganson', 'Terry', '01/11/1995', '02/06/1970', 'B', '100000 ', '
['32', 'Bremer', 'Ted', '04/07/1989', '26/03/1959', 'D', '99000 ', '59 ']
['210', 'McDonald', 'Tammy L.', '20/10/1989', '22/03/1949', 'A', '47000 ',
['211', 'McDonald', 'Tammy L.', '03/12/1991', '25/09/1968', 'B', '37000 ',
['243', 'Orman', 'Tad', '30/10/1978', '03/09/1973', 'E', '68000 ', '45 ']
```

   B. Sort by column “Department” and then by column “Salary”.

   Hint: You might need to import csv and operator

```
['366', 'Stinson', 'Craig', '21/02/2003', '16/11/1943', 'A', '22000 ', '74
['43', 'Cavallari', 'Matthew J.', '13/01/1991', '11/05/1969', 'A', '25000
['254', 'Peters', 'James', '23/09/1977', '10/08/1949', 'A', '26000 ', '69
['123', 'Harui', 'Roger', '29/01/1985', '29/07/1972', 'A', '28000 ', '46 '
['273', 'Rodman', 'John', '24/03/1999', '05/01/1975', 'A', '29000 ', '43 '
['287', 'Schmidt', 'Steve', '21/07/1986', '04/12/1963', 'A', '29000 ', '54
['338', 'Voss', 'Florian', '03/12/1989', '03/01/1956', 'A', '29000 ', '62
['95', 'Galvin', 'Janice', '22/01/1989', '27/08/1951', 'A', '30000 ', '67
['109', 'Grande', 'Jon', '22/04/2000', '09/11/1961', 'A', '30000 ', '56 ']
['85', 'Flood', 'Kathie', '08/08/1992', '27/03/1965', 'A', '32000 ', '53 '
['30', 'Bradley', 'David M', '13/07/1984', '28/02/1954', 'A', '33000 ', '6
['135', 'Hoeing', 'Helge', '08/11/1979', '03/11/1955', 'A', '34000 ', '62
['156', 'Jones', 'Brannon', '04/01/1982', '11/11/1959', 'A', '34000 ', '58
['320', 'Tiano', 'Mike', '28/06/1999', '19/01/1975', 'A', '34000 ', '43 ']
['89', 'Fort', 'Garth', '16/01/1994', '03/02/1978', 'A', '36000 ', '40 ']
['96', 'Ganio', 'Jon', '10/09/1990', '08/12/1957', 'A', '36000 ', '60 ']
['250', 'Patel', 'Rajesh M.', '17/01/1985', '15/12/1955', 'A', '36000 ', '
['67', 'Dickmann', 'Gabriele', '31/05/1983', '23/09/1949', 'A', '37000 ',
['237', 'Norman', 'Laura', '11/07/1981', '07/01/1951', 'A', '37000 ', '67
```

2. Develop a program to read the file "OfficeSupplies.csv", and then sort by column "OrderDate'.
   Hint: You might need to import csv, operator and datetime.

```
['4-Jul-2014', 'East', 'Richard', 'Pen Set', '62', '4.99']
['12-Jul-2014', 'East', 'Nick', 'Binder', '29', '1.99']
['21-Jul-2014', 'Central', 'Morgan', 'Pen Set', '55', '12.49']
['29-Jul-2014', 'East', 'Susan', 'Binder', '81', '19.99']
['7-Aug-2014', 'Central', 'Matthew', 'Pen Set', '42', '23.95']
['15-Aug-2014', 'East', 'Richard', 'Pencil', '35', '4.99']
['24-Aug-2014', 'West', 'James', 'Desk', '3', '275']
['1-Sep-2014', 'Central', 'Smith', 'Desk', '2', '125']
['10-Sep-2014', 'Central', 'Bill', 'Pencil', '7', '1.29']
['18-Sep-2014', 'East', 'Richard', 'Pen Set', '16', '15.99']
['27-Sep-2014', 'West', 'James', 'Pen', '76', '1.99']
['5-Oct-2014', 'Central', 'Morgan', 'Binder', '28', '8.99']
['14-Oct-2014', 'West', 'Thomas', 'Binder', '57', '19.99']
['22-Oct-2014', 'East', 'Richard', 'Pen', '64', '8.99']
['31-Oct-2014', 'Central', 'Rachel', 'Pencil', '14', '1.29']
['8-Nov-2014', 'East', 'Susan', 'Pen', '15', '19.99']
['17-Nov-2014', 'Central', 'Alex', 'Binder', '11', '4.99']
['25-Nov-2014', 'Central', 'Matthew', 'Pen Set', '96', '4.99']
['4-Dec-2014', 'Central', 'Alex', 'Binder', '94', '19.99']
['12-Dec-2014', 'Central', 'Smith', 'Pencil', '67', '1.29']
['21-Dec-2014', 'Central', 'Rachel', 'Binder', '28', '4.99']
['29-Dec-2014', 'East', 'Susan', 'Pen Set', '74', '15.99']
['6-Jan-2015', 'East', 'Richard', 'Pencil', '95', '1.99']
['15-Jan-2015', 'Central', 'Bill', 'Binder', '46', '8.99']
['23-Jan-2015', 'Central', 'Matthew', 'Binder', '50', '19.99']
['1-Feb-2015', 'Central', 'Smith', 'Binder', '87', '15']
['9-Feb-2015', 'Central', 'Alex', 'Pencil', '36', '4.99']
['18-Feb-2015', 'East', 'Richard', 'Binder', '4', '4.99']
['26-Feb-2015', 'Central', 'Bill', 'Pen', '27', '19.99']
['7-Mar-2015', 'West', 'James', 'Binder', '7', '19.99']
['15-Mar-2015', 'West', 'James', 'Pencil', '56', '2.99']
['24-Mar-2015', 'Central', 'Alex', 'Pen Set', '50', '4.99']
['1-Apr-2015', 'East', 'Richard', 'Binder', '60', '4.99']
['10-Apr-2015', 'Central', 'Rachel', 'Pencil', '66', '1.99']
['18-Apr-2015', 'Central', 'Rachel', 'Pencil', '75', '1.99']
['27-Apr-2015', 'East', 'Nick', 'Pen', '96', '4.99']
['5-May-2015', 'Central', 'Alex', 'Pencil', '90', '4.99']
['14-May-2015', 'Central', 'Bill', 'Pencil', '53', '1.29']
```

3. Yahoo Finance is a good place to find out stock information. Develop a program to read the downloaded file "*0700.HK.csv*" for Tencent Holdings Limited (0700.HK). Then find out the highest price, lowest price and the corresponding date.

```
The highest price is 476.600006 on 2018-01-29
The lowest price is 0.675 on 2004-07-26
```

4. Facebook, IG and Twitter are the most popular social media nowadays. However, analysis of these social media message is a complicate task. Develop a program to clean up the message in file "Message.txt" so that it contains only the user's message. That is, remove all URLs, hashtags, mentions, punctuations, etc

   Hint: You might need to import re.

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Good advice What I would do differently if I was learning to code today
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