

Assignment Marking Sheet

Personal Data

Group Members (ID, Name, Programme, Practical Group) : 1.MAT2002090,BOONSIXIAN,MAT,- 2.----- 3.-----	Practical Lecturer: Prof. Sugumaran A/L Nallusamy
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Overall Mark:

/100%

Submission Status

No submission	Upload wrong file	Late submission	No issue

1. Compilation and Running

Does not compile	Compile but no output/ wrong output	Compile and produce output

2. Presentation (6%)

(a) **Comments and Variable names (6%):** ☐ Poor choice ☐ Can be improved ☐ Meaningful

3. Program Component (54% + Presentation 6% = 60%)

Task III – Search by item number					4	
Task IV – Search by keyword					6	
Task V – Show low inventories					4	
Task VI – Update					6	
Task VII – Add					4	
Task VIII – Delete					8	
Task IX – Write to file with updates					6	
Presentation comments and variables names ...					6	
					Total	0

4. Report and other components (40%)

Components	Missing	Poor	Good	Excellent	Maximum Marks	Marks Obtained
Flowcharts/Pseudocode					20	
Sample text file					5	
General: Efforts, etc.					15	
					Total	0

Comments

Flow chart/Pseudocode :

0.define the main function

Set chk to True

While chk

Display Menu for user to choose

Input the option

If option is one

Call List function

elif option is two

Call SrcByINum function

elif option is three

Call SrcByKW function

elif option is four

Call ShowLI function

elif option is five

Call Update function

elif option is six

Call Add function

elif option is seven

Call Delete function

elif option is eight

Call Exit function

else

Print "Not Valid Option"

Input ans for they want continue

If repeat is n

Set chk to false

The main function is called.(last row)

1.define the list function

Format the titles (item number,item name,...) to be printed neatly

The file is file is read and loop through each line ,

For each line in file

Each line in file is split to 8 parts and form a list and each element saved in their variables

Print 8 parts of each line with formatting.

2.define the Search by item number

Set line number to zero

User input INumS

Print the titles (item number,item name,...) using formatting

Read the file

For each line in file(the file is read)

Line number is increased by 1

Each line in file is split to 8 parts and form a list and each element saved in their variables

If the user input INums same as Item Number

The information in variable will be display

End the for loop (Because no two item number are the same)

Elif line number is smaller than 20

Continue to run

Else (the line number is equal to twenty but item number is not matched yet)

Print "no result ."

3. define the Search by keyword

Set chk=False

Set line number to zero

Receive key word from user input

Read the text file line by line

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```
For each line in file
    Line number is increased by 1
    Each line in file is split to 8 parts and form a list and each element saved in their variables
    If the lowercase of user input string is a substring of element from the list (each line forms
a list)
        The information in variable will be display
        The chk is set as True
    Elif line number is smaller than 20
        Continue to run
    Elif chk is False (which means the key word is not in the file)
        Print "no result"
```

4.define the Show low inventories

```
Print the titles (item number,item name,...) using formatting
Read the file
    For each line in the file
        Each line in file is split to 8 parts and form a list and each element saved in their variables
        If the 5th index in list (Quantity) smaller than 10
            The information in variable will be display.
```

5.define update function

```
Set line number to zero
Receive INumS from user input
Read the text file
    For each line in file
        Line number increased by 1
        Each line in file is split to 8 parts and form a list and each element saved in their variables
        If INumS same as the first element in list (The item number)
            Set LineToEdit to line number minus one
            Input new data for all variables
        Read the file
            Set the lines as a list by setting each row in file as an element
        Set a as a combine of string of other data input by user
        Set the element in lines that needs to be edit to string a
        Write the file
            For line in lines(list)
                Write back the line for each row of the file accordingly.
```

6.define add function

```
Input new data for all variables
Append the file
    Generate a new line in file with data input by user
```

7.define delete function

```
Input Item num that need to be delete
Read the file
    Set the lines as a list by setting each row in file as an element
Write the file
    For line in lines
        Each line in lines is split to 8 parts and form a list and each element saved in their
        variables
        IF item num(input) is not in item number (the original data)
            Those line that fulfill the condition will be written back
```

8.define exit function

```
Print "all change have been made"
Call quit ()
```

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Input text file

assg.txt - Notepad

— □

File Edit Format View Help

```
12300,cooking oil,5kg,Knife,19.99,20,Ahmad Zalini,012-3460521
12301,cooking oil,5kg,Red Eagle,22.45,9,Ahmad Zalini,012-3460522
12302,white rice super,10kg,Jasmine,24.99,8,Albert Loo,017-6481238
12303,white rice super,10kg,Jati,26.00,12,Albert Loo,017-6481239
12304,white rice super,8kg,Taci,23.00,14,Eric Chua,019-2123333
12305,chilli sauce,500g,Life,3.10,43,Eric Chua,019-2123334
12306,chilli sauce,500g,Kimbali,3.20,35,Lee King Cho,012-3716215
12307,tomato sauce,600g,Maggi,3.44,23,Lee King Cho,012-3716216
12308,tomato sauce,600g,Deggi,5.44,6,Lee King Cho,012-3716217
12309,cheese,800g,Daily,6.12,3,Asley Lau,018-2130912
12310,cheese,800g,Fresh,5.34,34,Asley Lau,018-2130913
12311,bread,350g,Masimo,3.44,33,Edward Lim,012-3344455
12312,bread,450g,Gardenia,3.45,12,Edward Lim,012-3344456
12313,chocolate bread,500g,Chewv,3.77,31,Edward Lim,012-3344457
12314,sugar,1kg,Domino,6.00,14,Andy Ting,013-4453675
12315,sugar,1kg,Daddy,6.00,17,Andy Ting,013-4453676
12316,pepsi,300g,Pep,2.00,11,Andy Ting,013-4453677
12317,soda,400g,Coke,3.00,15,Climbert Lim,019-3759361
12318,jam,500g,Chivers,6.90,13,Climbert Lim,019-3759362
12319,jam,500g,Hosa,6.90,15,Climbert Lim,019-3759363
```

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Python Program(4photo)

```
1 #Using formatting to form certain spaces.
2 def List():
3     print("{0:13s}{1:20s}{2:5s}{3:10s}{4:7s}{5:5s}{6:20s}{7:20s}".format("Item Number","Item Name","Size","Brand","Price","Qty","Supplier","Contact"))
4     with open("D:/Python/ass_pypython/assg.txt",'r') as file :
5         for line in file :
6             Item_Number,Item_Name,Size,Brand,Price,Qty,Supplier,Contact = line.split(',')
7             print("{0:13s}{1:20s}{2:5s}{3:10s}{4:7s}{5:5s}{6:20s}{7:20s}".format(Item_Number,Item_Name,Size,Brand,Price,Qty,Supplier,Contact))
8 #use line num to control amount of "no result " printed .
9 def SrcByINum():
10     line_number=0
11     INumS = input("Search record by item number:")
12     print("{0:13s}{1:20s}{2:5s}{3:10s}{4:7s}{5:5s}{6:20s}{7:20s}".format("Item Number","Item Name","Size","Brand","Price","Qty","Supplier","Contact"))
13     with open("D:/Python/ass_pypython/assg.txt",'r') as file :
14         for line in file:
15             line_number +=1
16             Item_Number,Item_Name,Size,Brand,Price,Qty,Supplier,Contact = line.split(',')
17             if INumS == Item_Number:
18                 print("{0:13s}{1:20s}{2:5s}{3:10s}{4:7s}{5:5s}{6:20s}{7:20s}".format(Item_Number,Item_Name,Size,Brand,Price,Qty,Supplier,Contact))
19                 break
20             elif line_number<20:
21                 continue
22             else:
23                 print("No result,only from 12300 to 12319")
24
25 def SrcByKW():
26     chk=False
27     line_number=0
28     Kw=input("Search record by keyword:")
29     with open("D:/Python/ass_pypython/assg.txt",'r') as file :
30         for line in file:
31             line_number +=1
32             Item_Number,Item_Name,Size,Brand,Price,Qty,Supplier,Contact = line.split(',')
33             if any(Kw.lower() in x.lower() for x in line.split(',')):
34                 print("{0:13s}{1:20s}{2:5s}{3:10s}{4:7s}{5:5s}{6:20s}{7:20s}".format(Item_Number,Item_Name,Size,Brand,Price,Qty,Supplier,Contact))
35                 chk=True
36             elif line_number<20:
37                 continue
38             elif chk==False:
39                 print("No result")
40
41 def ShowLI():
42     print("{0:13s}{1:20s}{2:5s}{3:10s}{4:7s}{5:5s}{6:20s}{7:20s}".format("Item Number","Item Name","Size","Brand","Price","Qty","Supplier","Contact"))
43     with open("D:/Python/ass_pypython/assg.txt",'r') as file :
44         for line in file:
45             Item_Number,Item_Name,Size,Brand,Price,Qty,Supplier,Contact = line.split(',')
46             if int(line.split(',')[5])<10:
47                 print("{0:13s}{1:20s}{2:5s}{3:10s}{4:7s}{5:5s}{6:20s}{7:20s}".format(Item_Number,Item_Name,Size,Brand,Price,Qty,Supplier,Contact))
```

```
def Update():
    line_number=0
    INum5 = input("Type your item number:")
    with open("D:/Python/ass_pypython/assg.txt",'r') as file :
        for line in file:
            line_number+=1
            Item_Number,Item_Name,Size,Brand,Price,Qty,Supplier,Contact = line.split(',')
            if INum5 == line.split(',')[0]:
                lineToEdit=line_number-1
                Item_Name=input("Enter new item name:")
                Size=input("Enter new size:")
                Brand=input("Enter new brand:")
                Price=input("Enter new Price:")
                Qty=input("Enter new qty:")
                Supplier=input("Enter new Supplier:")
                Contact=input("Enter new Contact:")

                with open ("D:/Python/ass_pypython/assg.txt",'r') as file :
                    lines=file.readlines()
                    a=str(Item_Number) +','+str(Item_Name)+','+str(Size)+','+str(Brand)+','+str(Price)+','+str(Qty)+','+str(Supplier)+','+str(Contact)+'\n'
                    lines[lineToEdit]=str(a)
                with open ("D:/Python/ass_pypython/assg.txt",'w') as file:
                    for line in lines:
                        file.write(line)

def Add():
    Item_Number=input("Enter new item number:")
    Item_Name=input("Enter new item name:")
    Size=input("Enter new size:")
    Brand=input("Enter new brand:")
    Price=input("Enter new Price:")
    Qty=input("Enter new qty:")
    Supplier=input("Enter new Supplier:")
    Contact=input("Enter new Contact:")
    with open("D:/Python/ass_pypython/assg.txt",'a') as file:
        file.write(Item_Number+","+Item_Name+","+Size+","+Brand+","+Price+","+Qty+","+Supplier+","+Contact)
#readlines from a list with each row as an item in the list,
def Delete():
    Item_Num=input("Enter the item number to delete:")
    with open("D:/Python/ass_pypython/assg.txt",'r') as file:
        lines = file.readlines()

#
    with open("D:/Python/ass_pypython/assg.txt",'w') as file:
        for line in lines:
            Item_Number,Item_Name,Size,Brand,Price,Qty,Supplier,Contact = line.split(',')
            if Item_Num.strip() not in Item_Number.strip():
                file.write(line)
```

```
94 #The program will be stopped
95 def Exit():
96
97     print("All changes have been made.")
98     quit()
99
100
101 #The main func will display options for the user,chk is used to alter the decision of user.
102 def main():
103
104     chk = True
105     while chk:
106         print("*****")
107         print("1.Display list of records          *")
108         print("2.Search by item number          *")
109         print("3.Search by keyword          *")
110         print("4.Show low inventories          *")
111         print("5.Update the record          *")
112         print("6.Add a new record to list          *")
113         print("7.Delete record from list          *")
114         print("8.Exit the program.          *")
115         print("*****")
116
117         option = input("Enter an option.")
118         if option=="1":
119             List()
120         elif option=="2":
121             SrcByINum()
122         elif option=="3":
123             SrcByKW()
124         elif option=="4":
125             ShowLI()
126         elif option=="5":
127             Update()
128         elif option=="6":
129             Add()
130         elif option=="7":
131             Delete()
132         elif option=="8":
133             Exit()
134         else:
135             print("Not Valid option")
136
137         repeat = input("Continue? (y/n)")
138         if repeat == 'n':
139             chk = False
140     #Call the function
141     if __name__ == '__main__':
142         main()
```

Sample output of program

```
◀ ▶  assingment_1.py  ×  *REPL* [python]  ×
*****
1.Display list of records *
2.Search by item number *
3.Search by keyword *
4.Show low inventories *
5.Update the record *
6.Add a new record to list *
7.Delete record from list *
8.Exit the program. *
*****
Enter an option.
```

Sample of input data and test cases :

```

assingment_1.py x *REPL* [python] x
Enter an option.1
Item Number  Item Name      Size Brand    Price Qty  Supplier      Contact
12300        cooking oil    5kg Knife     19.99 20   Ahmad Zalini  012-3460521
12301        cooking oil    5kg Red Eagle  22.45 9    Ahmad Zalini  012-3460522
12302        white rice super 10kg Jasmine  24.99 8    Albert Loo    017-6481238
12303        white rice super 10kg Jati     26.00 12   Albert Loo    017-6481239
12304        white rice super 8kg Taci      23.00 14   Eric Chua     019-2123333
12305        chilli sauce    500g Life     3.10 43   Eric Chua     019-2123334
12306        chilli sauce    500g Kimbali  3.20 35   Lee King Cho  012-3716215
12307        tomato sauce    600g Maggi    3.44 23   Lee King Cho  012-3716216
12308        tomato sauce    600g Deggi    5.44 6    Lee King Cho  012-3716217
12309        cheese         800g Daily    6.12 3    Asley Lau     018-2130912
12310        cheese         800g Fresh    5.34 34   Asley Lau     018-2130913
12311        bread          350g Masimo   3.44 33   Edward Lim    012-3344455
12312        bread          450g Gardenia 3.45 12   Edward Lim    012-3344456
12313        chocolate bread 500g Chewv    3.77 31   Edward Lim    012-3344457
12314        sugar          1kg Domino    6.00 14   Andy Ting     013-4453675
12315        sugar          1kg Daddy     6.00 17   Andy Ting     013-4453676
12316        pepsi          300g Pep      2.00 11   Andy Ting     013-4453677
12317        soda           400g Coke     3.00 15   Climbert Lim  019-3759361
12318        jam            500g Chivers  6.90 13   Climbert Lim  019-3759362
12319        jam            500g Hosa     6.90 15   Climbert Lim  019-3759363
Continue? (y/n)

4.SHOW LOW INVENTORIES
5.Update the record      *
6.Add a new record to list *
7.Delete record from list *
8.Exit the program.      *
*****
Enter an option.

```


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REPL [python] - Sublime Text (UNREGISTERED)

File Edit Selection Find View Goto Tools Project Preferences Help

assignment_1.py *REPL* [python]

```
*****
Enter an option.2
Search record by item number:12315
Item Number  Item Name      Size Brand   Price Qty  Supplier    Contact
12315        sugar           1kg  Daddy    6.00  17   Andy Ting   013-4453676

Continue? (y/n)y
*****
1.Display List of records      *
2.Search by item number       *
3.Search by keyword           *
4.Show low inventories        *
5.Update the record           *
6.Add a new record to list     *
7.Delete record from list     *
8.Exit the program.           *
*****
Enter an option.3
Search record by keyword:il
12300        cooking oil      5kg  Knife    19.99  20   Ahmad Zalini 012-3460521
12301        cooking oil      5kg  Red Eagle 22.45  9    Ahmad Zalini 012-3460522
12305        chilli sauce     500g Life   3.10  43   Eric Chua    019-2123334
12306        chilli sauce     500g Kimbali 3.20  35   Lee King Cho 012-3716215
12309        cheese          800g Daily  6.12  3    Asley Lau    018-2130912

Continue? (y/n)

6.Add a new record to list     *
7.Delete record from list     *
8.Exit the program.           *
*****
Enter an option.
```

Line 92, Column 16 Tab Size: 4 Python

```
Enter an option.4
Item Number  Item Name      Size Brand   Price Qty  Supplier    Contact
12301        cooking oil      5kg  Red Eagle 22.45  9    Ahmad Zalini 012-3460522
12302        white rice super 10kg Jasmine 24.99  8    Albert Loo   017-6481238
12308        tomato sauce    600g Deggi  5.44  6    Lee King Cho 012-3716217
12309        cheese          800g Daily  6.12  3    Asley Lau    018-2130912
```

REPL [python] - Sublime Text (UNREGISTERED)

File Edit Selection Find View Goto Tools Project Preferences Help

assignment_1.py *REPL* [python]

```
*****
Enter an option.5
Type your item number:123
Continue? (y/n)y
*****
1.Display List of records      *
2.Search by item number       *
3.Search by keyword           *
4.Show low inventories        *
5.Update the record           *
6.Add a new record to list     *
7.Delete record from list     *
8.Exit the program.           *
*****
Enter an option.5
Type your item number:12300
Enter new item name:oil
Enter new size:5kg
Enter new brand:A
Enter new Price:5
Enter new qty:5
Enter new Supplier:Ali
Enter new Contact:019-9999999
Continue? (y/n)
```

assg.txt - Notepad

File Edit Format View Help

```
12300,oil,5kg,A,5,5,Ali,019-9999999
12301,cooking oil,5kg,Red Eagle,22.45,9,Ahmad Zalini,012-3460522
12302,white rice super,10kg,Jasmine,24.99,8,Albert Loo,017-6481238
12303,white rice super,10kg,Jati,26.00,12,Albert Loo,017-6481239
12304,white rice super,8kg,Taci,23.00,14,Eric Chua,019-2123333
12305,chilli sauce,500g,Life,3.10,43,Eric Chua,019-2123334
12306,chilli sauce,500g,Kimbali,3.20,35,Lee King Cho,012-3716215
12307,tomato sauce,600g,Maggi,3.44,23,Lee King Cho,012-3716216
12308,tomato sauce,600g,Deggi,5.44,6,Lee King Cho,012-3716217
12309,cheese,800g,Daily,6.12,3,Asley Lau,018-2130912
12310,cheese,800g,Fresh,5.34,34,Asley Lau,018-2130913
12311,bread,350g,Masimo,3.44,33,Edward Lim,012-3344455
12312,bread,450g,Gardenia,3.45,12,Edward Lim,012-3344456
12313,chocolate bread,500g,Chewv,3.77,31,Edward Lim,012-3344457
12314,sugar,1kg,Domino,6.00,14,Andy Ting,013-4453675
12315,sugar,1kg,Daddy,6.00,17,Andy Ting,013-4453676
12316,pepsi,300g,Pep,2.00,11,Andy Ting,013-4453677
12317,soda,400g,Coke,3.00,15,Climbert Lim,019-3759361
12318,jam,500g,Chivers,6.90,13,Climbert Lim,019-3759362
12319,jam,500g,Hosa,6.90,15,Climbert Lim,019-3759363
```

Ln 1, Col 1 100% Windows (CRLF) UTF-8

Line 146, Column 16 Tab Size: 4 Python

```
6.Add a new record to list     *
7.Delete record from list     *
8.Exit the program.           *
*****
Enter an option.
```

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```
*****
1.Display List of records      *
2.Search by item number       *
3.Search by keyword           *
4.Show low inventories        *
5.Update the record           *
6.Add a new record to List    *
7.Delete record from list     *
8.Exit the program.           *
*****
```

```
Enter an option.6
Enter new item number:12320
Enter new item name:jelly
Enter new size:100g
Enter new brand:Hola
Enter new Price:1.22
Enter new qty:5
Enter new Supplier:Alim
Enter new Contact:019-3547291
Continue? (y/n)
```

assg.txt - Notepad

File Edit Format View Help

```
12302,white rice super,10kg,Jasmine,24.99,8,Albert Loo,017-6481238
12303,white rice super,10kg,Jati,26.00,12,Albert Loo,017-6481239
12304,white rice super,8kg,Taci,23.00,14,Eric Chua,019-2123333
12305,chilli sauce,500g,Life,3.10,43,Eric Chua,019-2123334
12306,chilli sauce,500g,Kimbali,3.20,35,Lee King Cho,012-3716215
12307,tomato sauce,600g,Maggi,3.44,23,Lee King Cho,012-3716216
12308,tomato sauce,600g,Deggi,5.44,6,Lee King Cho,012-3716217
12309,cheese,800g,Daily,6.12,3,Asley Lau,018-2130912
12310,cheese,800g,Fresh,5.34,34,Asley Lau,018-2130913
12311,bread,350g,Masimo,3.44,33,Edward Lim,012-3344455
12312,bread,450g,Gardenia,3.45,12,Edward Lim,012-3344456
12313,chocolate bread,500g,Chewv,3.77,31,Edward Lim,012-3344457
12314,sugar,1kg,Domino,6.00,14,Andy Ting,013-4453675
12315,sugar,1kg,Daddy,6.00,17,Andy Ting,013-4453676
12316,pepsi,300g,Pep,2.00,11,Andy Ting,013-4453677
12317,soda,400g,Coke,3.00,15,Climbert Lim,019-3759361
12318,jam,500g,Chivers,6.90,13,Climbert Lim,019-3759362
12319,jam,500g,Hosa,6.90,15,Climbert Lim,019-3759363
12320,jelly,100g,Hola,1.22,5,Alim,019-3547291
```

Ln 21, Col 46

100%

Windows (CRLF)

UTF-8

Continue? (y/n)y

```
*****
1.Display List of records      *
2.Search by item number       *
3.Search by keyword           *
4.Show low inventories        *
5.Update the record           *
6.Add a new record to List    *
7.Delete record from list     *
8.Exit the program.           *
*****
```

```
Enter an option.7
Enter the item number to delete:12300
Continue? (y/n)8
```

```
*****
1.Display List of records      *
2.Search by item number       *
3.Search by keyword           *
4.Show low inventories        *
5.Update the record           *
6.Add a new record to List    *
7.Delete record from list     *
8.Exit the program.           *
*****
```

```
Enter an option.8
All changes have been made.
```

Repl Closed

```
*****
6.Add a new record to list     *
7.Delete record from list     *
8.Exit the program.           *
*****
Enter an option.
```

assg.txt - Notepad

File Edit Format View Help

```
12301,cooking oil,5kg,Red Eagle,22.45,9,Ahmad Zalini,012-3460522
12302,white rice super,10kg,Jasmine,24.99,8,Albert Loo,017-6481238
12303,white rice super,10kg,Jati,26.00,12,Albert Loo,017-6481239
12304,white rice super,8kg,Taci,23.00,14,Eric Chua,019-2123333
12305,chilli sauce,500g,Life,3.10,43,Eric Chua,019-2123334
12306,chilli sauce,500g,Kimbali,3.20,35,Lee King Cho,012-3716215
12307,tomato sauce,600g,Maggi,3.44,23,Lee King Cho,012-3716216
12308,tomato sauce,600g,Deggi,5.44,6,Lee King Cho,012-3716217
12309,cheese,800g,Daily,6.12,3,Asley Lau,018-2130912
12310,cheese,800g,Fresh,5.34,34,Asley Lau,018-2130913
12311,bread,350g,Masimo,3.44,33,Edward Lim,012-3344455
12312,bread,450g,Gardenia,3.45,12,Edward Lim,012-3344456
12313,chocolate bread,500g,Chewv,3.77,31,Edward Lim,012-3344457
12314,sugar,1kg,Domino,6.00,14,Andy Ting,013-4453675
12315,sugar,1kg,Daddy,6.00,17,Andy Ting,013-4453676
12316,pepsi,300g,Pep,2.00,11,Andy Ting,013-4453677
12317,soda,400g,Coke,3.00,15,Climbert Lim,019-3759361
12318,jam,500g,Chivers,6.90,13,Climbert Lim,019-3759362
12319,jam,500g,Hosa,6.90,15,Climbert Lim,019-3759363
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Ln 1, Col 1

100%

Windows (CRLF)

UTF-8