DIGITAL SKILLS FINAL PROJECT GROUP 3

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TOPICS INCLUDED IN OUR CODE

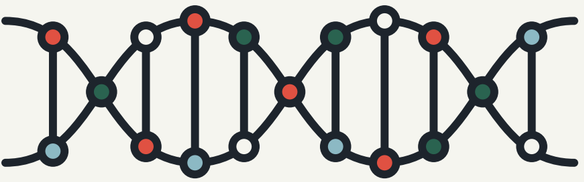
- LOGIN USING PASSWORD
- NAMING FILES.
- STORING ITEMS AND INFORMATIONS
- DISPLAYING ITEMS
- EDITING ITEM QUANTITIES
- DELETING AN ITEM
- ADDING AN ITEM
- SORTING ITEMS ASCENDING OR DESCENDING ORDER.

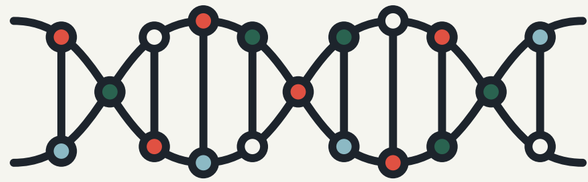
EXPECTATIONS AND OUTCOMES

A code that fulfills the needs of this project , developing algorithms and applying concepts learned in class , implementing the designed algorithm in python language (using programming language constructs such variables ,expressions , assigments statements ,if statements ,loops ,functions ,arrays list and etc.)

```
import os
options_list = ["Store item information.", "Display items of the same type.",
                "Edit an item.", "Delete an item.", "Add an item.", "Sort items."]
makeup_list = []

def log_in():
```

FIRST THREE LINES OF THE CODE MAKE THE LIST





```
def log_in():
    PASSWORD = '1234'
    entered_password = str(input('Enter the Password:'))
    while entered_password != PASSWORD:
        print ('The password is incorrect')
        print('')
        entered_password = str(input('Enter the Password again:'))
    print('The password is correct')
```

FUNCTION FOR LOGGING IN USING THE PASSWORD

FUNCTION FOR LOGGING IN USING THE PASSWORD

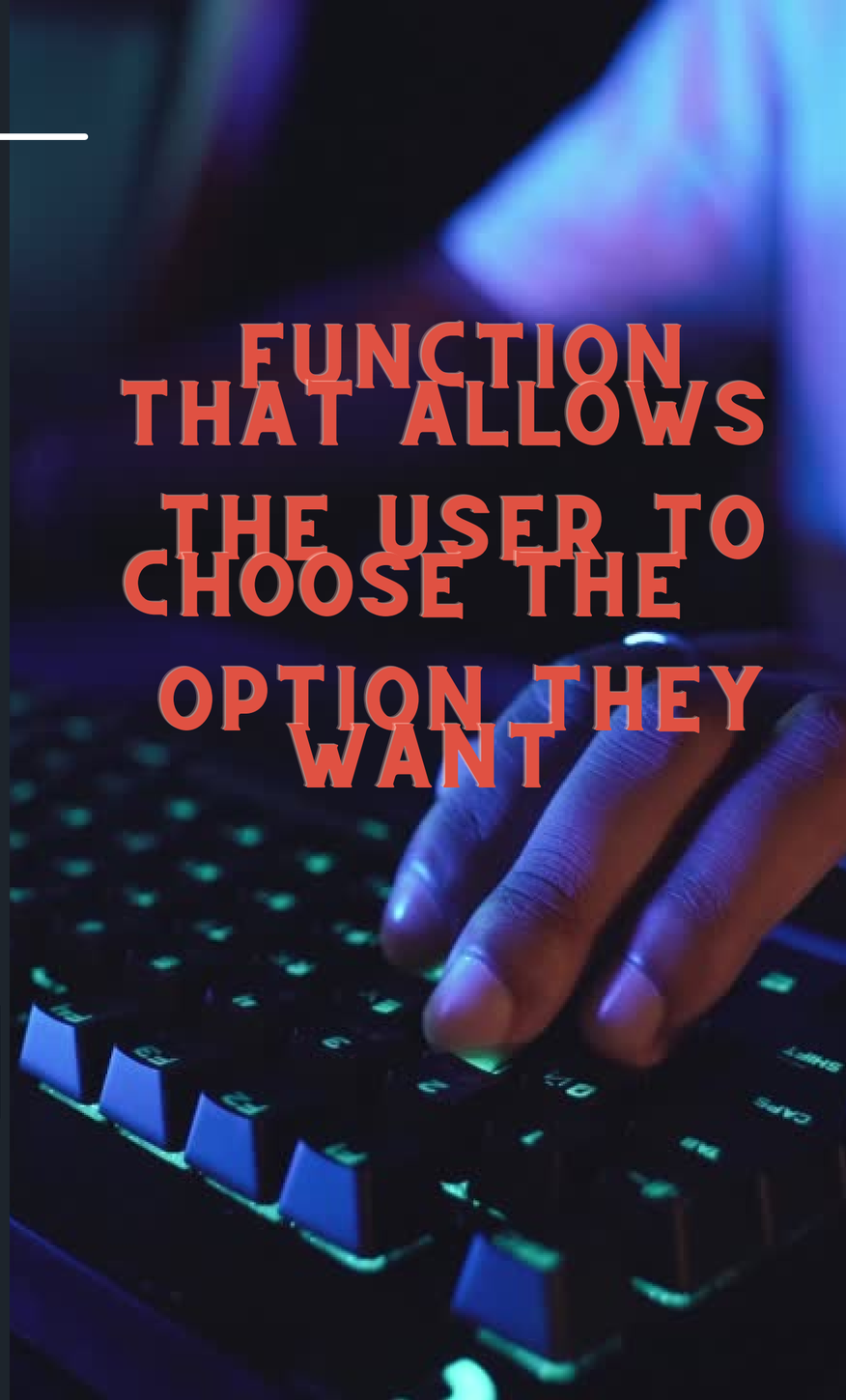
RUNNED CODE

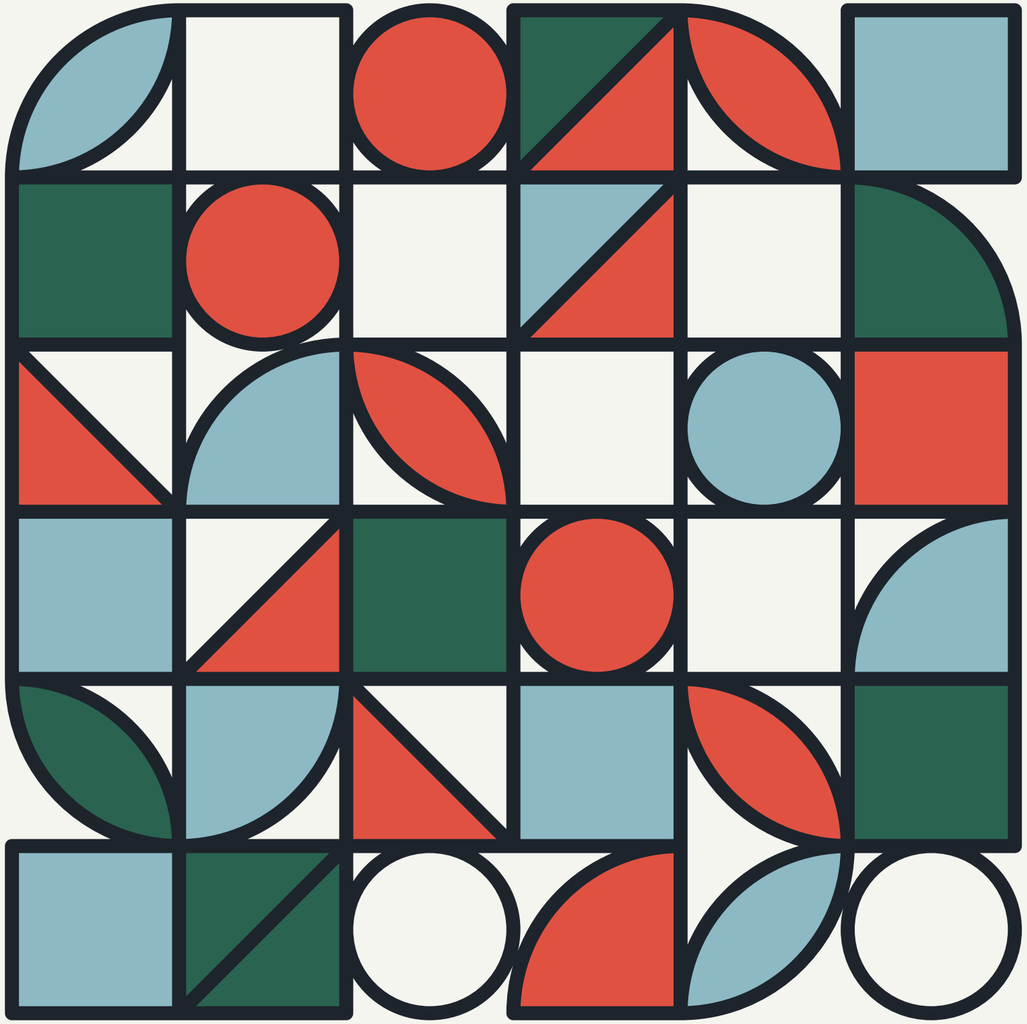
```
Welcome to Sephora

Enter the Password:1234
The password is correct
Which option do you want to carry out:
1) Store item information: name, type, and quantity
2) Display all items from the same type
3) Edit one item quantity
4) Delete an item
5) Add an item
6) Sort items ascending or descending
7) Close the program

Enter your number here:
```

DO YOU HAVE QUESTIONS SO FAR?

```python
def choosing_option():
    print ('Which option do you want to carry out:\n'
                        '1) Store item information: name, type, and quantity\n'
                        '2) Display all items from the same type \n'
                        '3) Edit one item quantity\n'
                        '4) Delete an item\n'
                        '5) Add an item\n'
                        '6) Sort items ascending or descending\n'
                        '7) Close the program\n')

    choosing_option = input('Enter your number here: ')

    if choosing_option == '1':
        store()
    elif choosing_option == '2':
        display()
    elif choosing_option == '3':
        edit()
    elif choosing_option == '4':
        delete()
    elif choosing_option == '5':
        add()
    elif choosing_option == '6':
        sort()
    else:
        exit_program()
```

FUNCTION THAT ALLOWS THE USER TO CHOOSE THE OPTION THEY WANT





```
Which option do you want to carry out:
1) Store item information: name, type, and quantity
2) Display all items from the same type
3) Edit one item quantity
4) Delete an item
5) Add an item
6) Sort items ascending or descending
7) Close the program

Enter your number here:
```

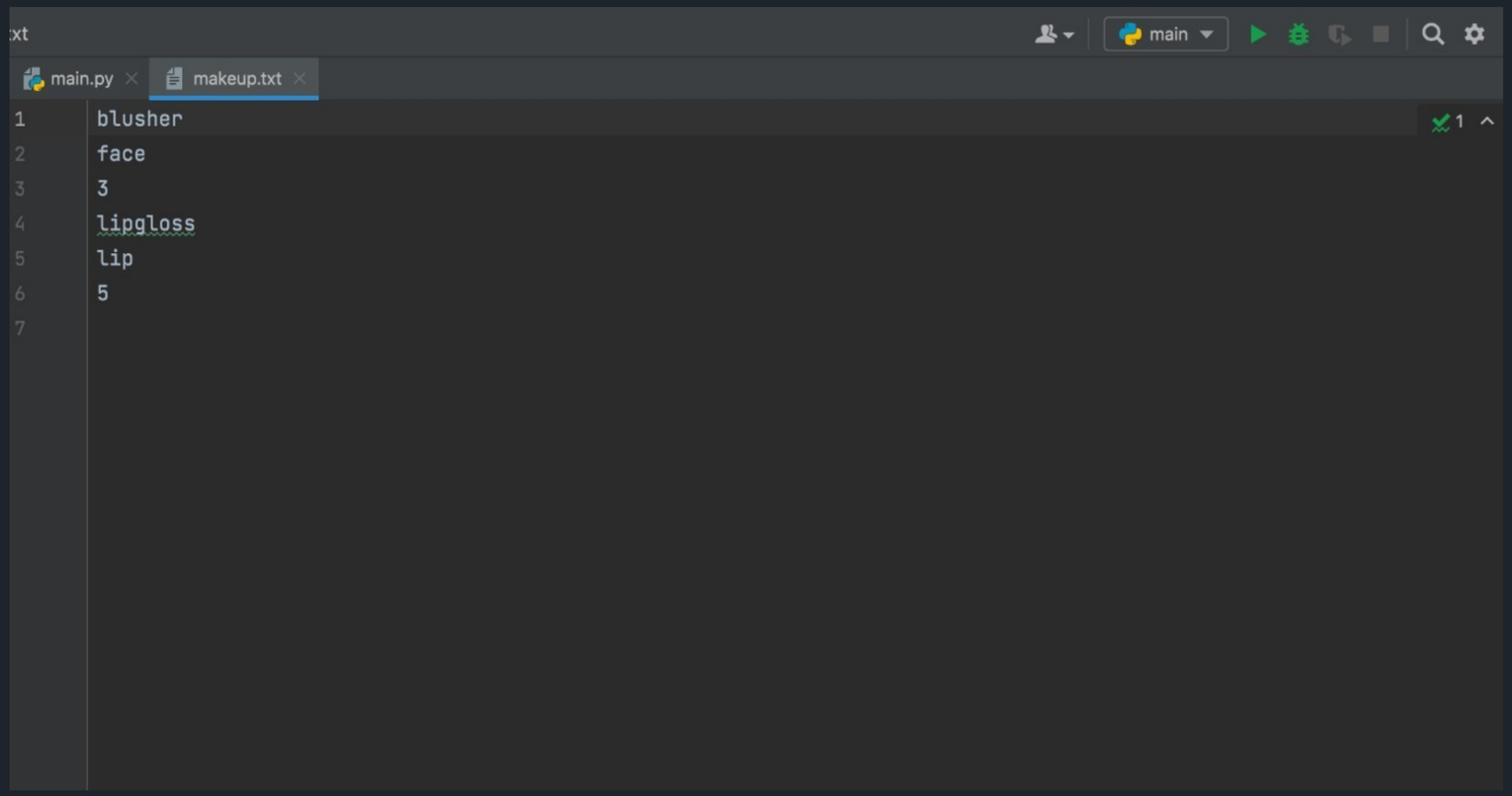
THE RUN

```
def store():
    makeup_file = open('makeup.txt', 'w')
    print('Enter the following data for the makeup products:')
    answer = 'y'

    while answer == 'y' or answer == 'Y':
        makeup = str(input('Enter the name of the product:'))
        type = str(input('Enter the type of the product (face,eye,lip):'))
        quantity = str(input('Enter the quantity of the product:'))
        print('')

        makeup_file.write(str(makeup + '\n'))
        makeup_file.write(str(type + '\n'))
        makeup_file.write(str(quantity) + '\n')

        answer = input('Do you want to add another product? (yes = y,no = n)')

    makeup_file.close()
    print('The information has been saved in makeup.txt :)')
```

FUNCTION THAT ALLOWS THE USER TO STORE THE PRODUCT'S INFORMATION :NAME , TYPE AND QUANTITY

THE RUN

```
Enter the Password:1234
The password is correct
Which option do you want to carry out:
1) Store item information: name, type, and quantity
2) Display all items from the same type
3) Edit one item quantity
4) Delete an item
5) Add an item
6) Sort items ascending or descending
7) Close the program

Enter your number here: 1
Enter the following data for the makeup products:
Enter the name of the product:blusher
Enter the type of the product (face,eye,lip):face
Enter the quantity of the product:3

Do you want to add another product? (yes = y,no = n)y
Enter the name of the product:lipgloss
Enter the type of the product (face,eye,lip):lip
Enter the quantity of the product:5

Do you want to add another product? (yes = y,no = n)n
The information has been saved in makeup.txt :)
Do you want to carry out another option? (yes = y, no = n) n
Closing the Program . . .

Process finished with exit code 0
```



IN THE FILE MAKEUP.TXT

```python
def edit():
    found = False

    search = input('Enter a description to search for: ')
    new_quantity = int(input('Enter the new quantity: '))

    makeup_file = open('makeup.txt', 'r')
    temp_file = open('temp.txt', 'w')

    name = makeup_file.readline()

    while name != '':
        type = makeup_file.readline()
        quantity = makeup_file.readline()
        name = name.rstrip('\n')
        type = type.rstrip('\n')
        quantity = quantity.rstrip('\n')

        if name == search:
            temp_file.write(name + '\n')
            temp_file.write(type + '\n')
            temp_file.write(str(new_quantity) + '\n')

            found = True
        else:
            temp_file.write(name + '\n')
            temp_file.write(type + '\n')
            temp_file.write(str(quantity) + '\n')
```

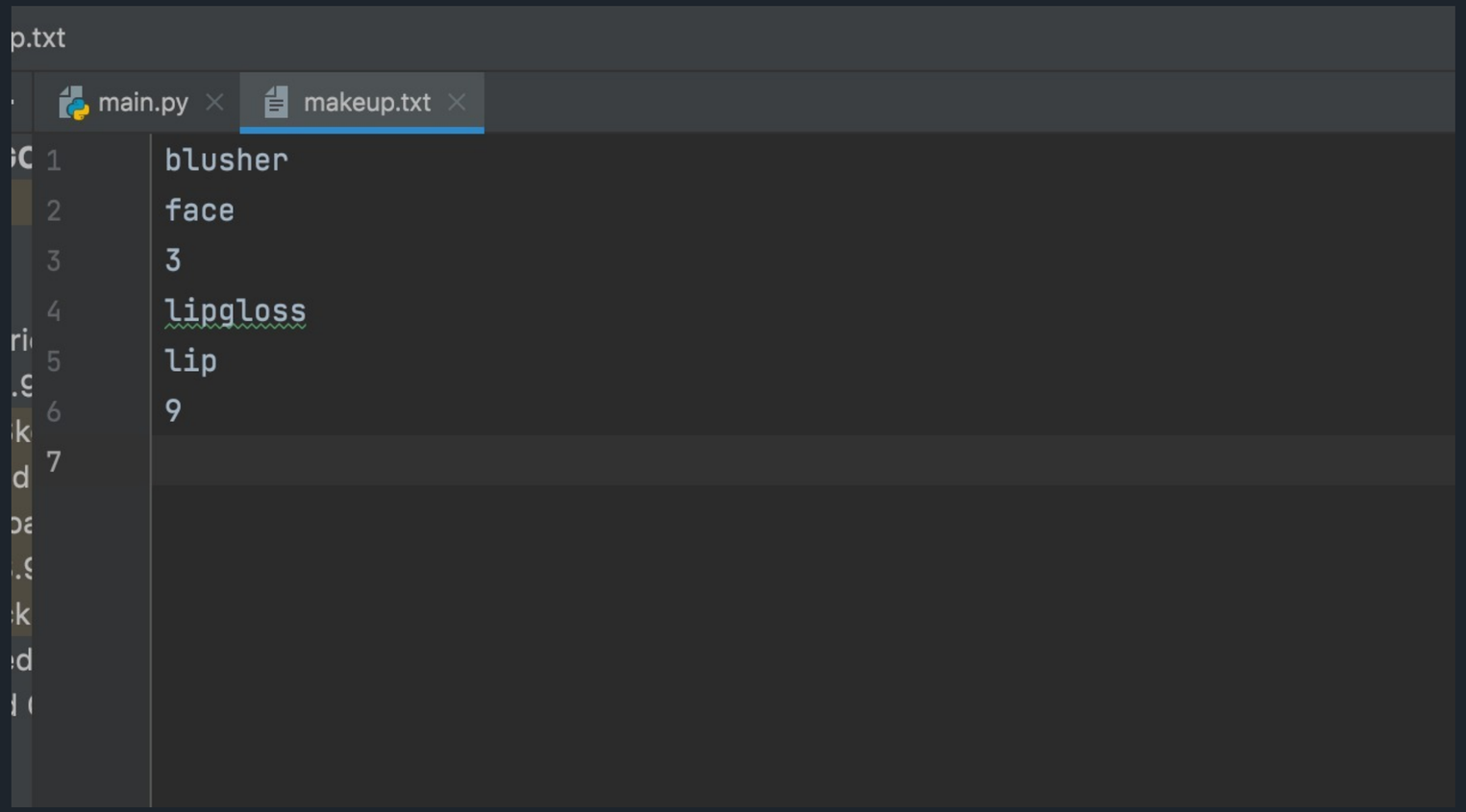
FUNCTION FOR EDITING A PRODUCT'S QUANTITY

```
    name = makeup_file.readline()

makeup_file.close()
temp_file.close()
os.remove('makeup.txt')
os.rename('temp.txt', 'makeup.txt')

if found:
    print('The file has been updated.')
else:
    print('That item was not found in the file.')
```

PART OF THE FUNCTION EDIT()

THE RUN

```
/Users/ameeraattiah/PycharmProjects/CS_project/venv/bin/python /Users/ameeraattiah/PycharmProjects/CS_project/main.py
Welcome to Sephora

Enter the Password:1234
The password is correct
Which option do you want to carry out:
1) Store item information: name, type, and quantity
2) Display all items from the same type
3) Edit one item quantity
4) Delete an item
5) Add an item
6) Sort items ascending or descending
7) Close the program

Enter your number here: 3
Enter a description to search for: lipgloss
Enter the new quantity: 9
The file has been updated.
Do you want to carry out another option? (yes = y, no = n) n
Closing the Program . . .

Process finished with exit code 0
```


p.txt
main.py
makeup.txt
1 blusher
2 face
3 3
4 lipgloss
5 lip
6 9
7

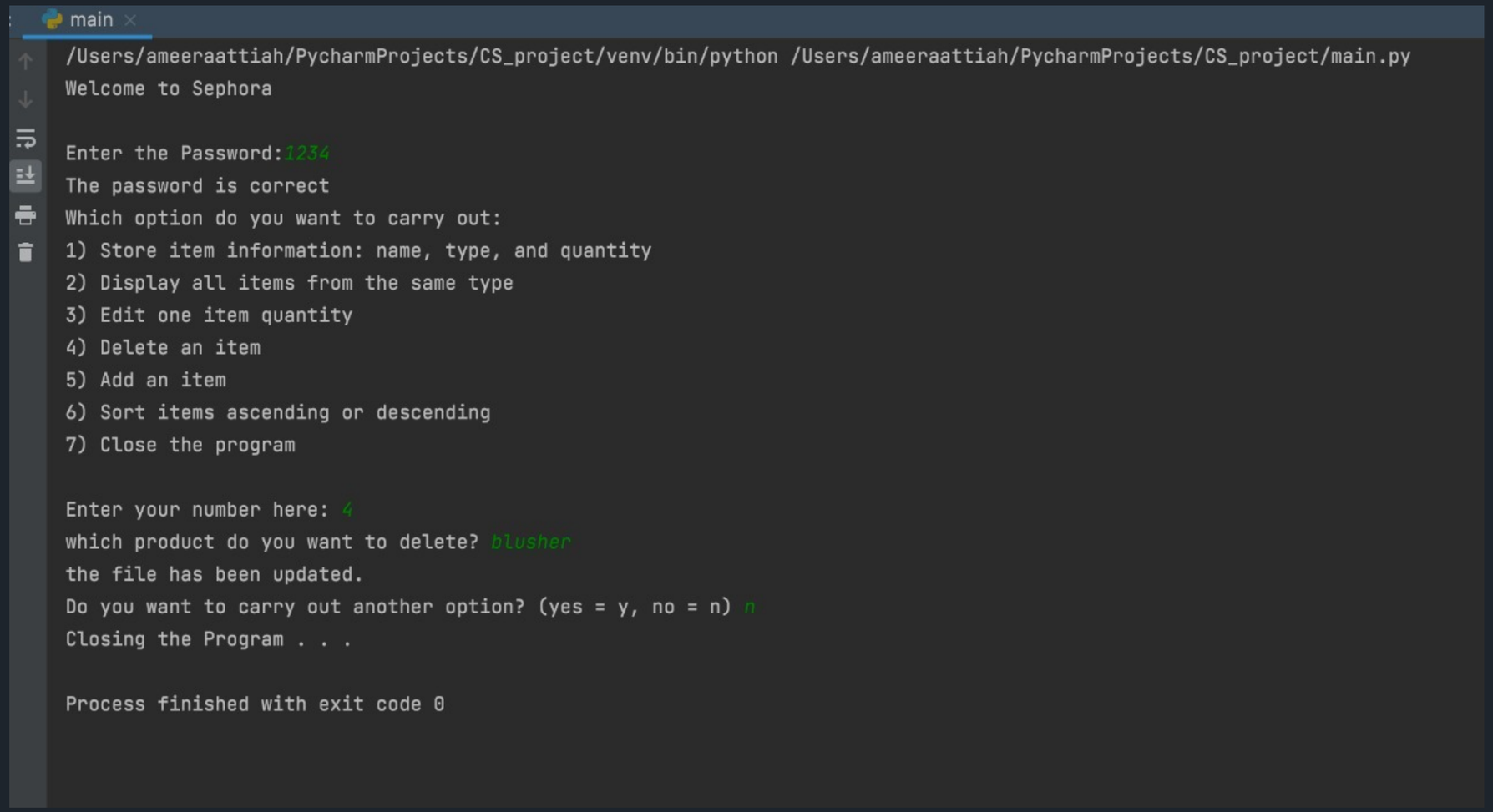
IN THE FILE

main.py | makeup.txt

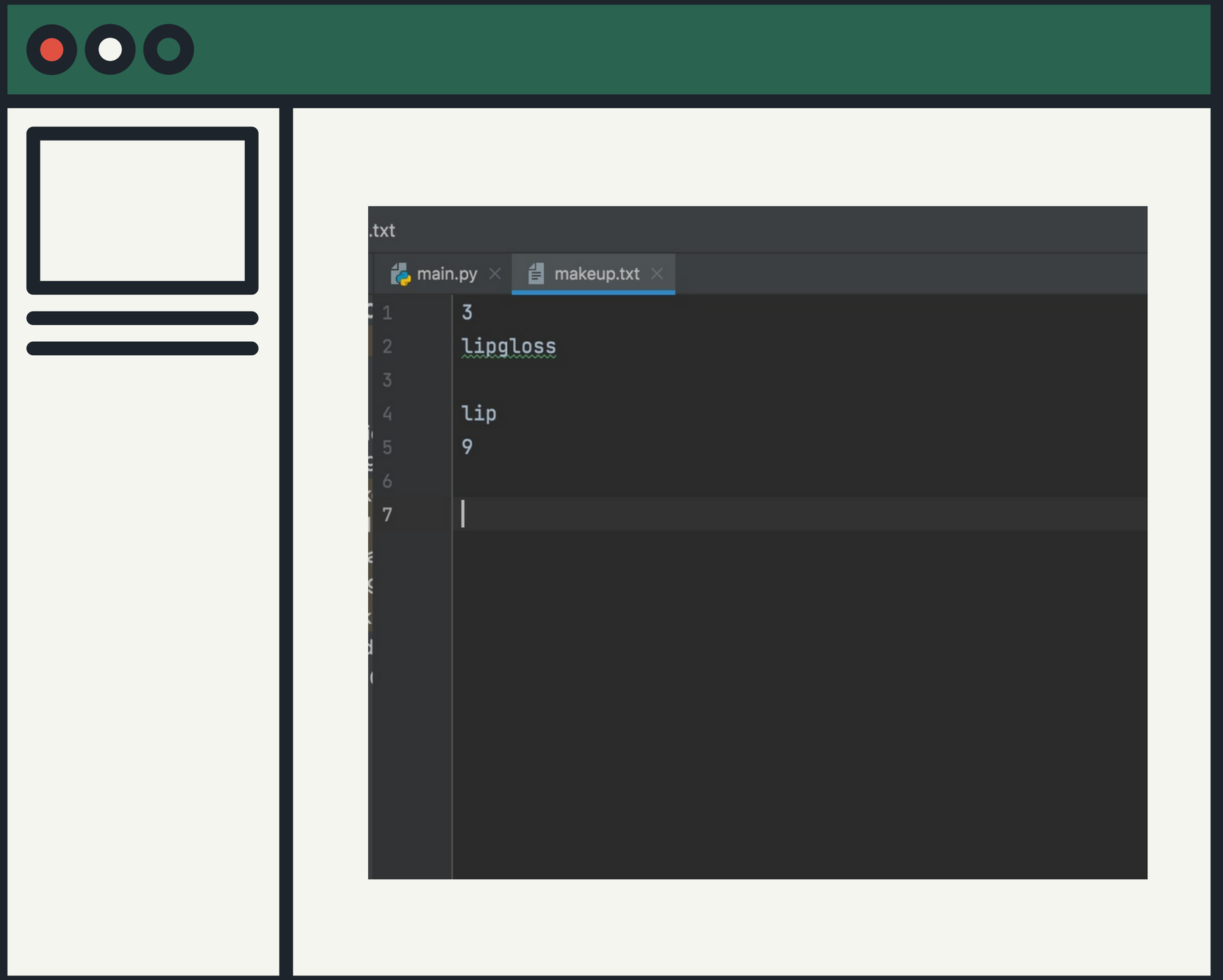
```
122  def delete():
123      found = False
124      search = input('which product do you want to delete? ')
125      makeup_file = open('makeup.txt', 'r')
126      temp_file = open('temp.txt', 'w')
127      descr = makeup_file.readline()
128      while descr != '':
129          qty = str(makeup_file.readline())
130          descr = descr.rstrip('\n')
131          if descr != search:
132              temp_file.write(descr + '\n')
133              temp_file.write(str(qty) + '\n')
134          else:
135              found = True
136          descr = makeup_file.readline()
137      makeup_file.close()
138      temp_file.close()
139      os.remove('makeup.txt')
140      os.rename('temp.txt', 'makeup.txt')
141      if found:
142          print('the file has been updated.')
143      else:
144          print('that item was not found in the file.')
145
```

THE FUNCTION FOR DELETING A PRODUCT

THE RUN


main
/Users/ameeraattiah/PycharmProjects/CS_project/venv/bin/python /Users/ameeraattiah/PycharmProjects/CS_project/main.py
Welcome to Sephora
Enter the Password:1234
The password is correct
Which option do you want to carry out:
1) Store item information: name, type, and quantity
2) Display all items from the same type
3) Edit one item quantity
4) Delete an item
5) Add an item
6) Sort items ascending or descending
7) Close the program
Enter your number here: 4
which product do you want to delete? blusher
the file has been updated.
Do you want to carry out another option? (yes = y, no = n) n
Closing the Program . . .
Process finished with exit code 0

IN THE FILE



THE FUNCTION FOR ADDING A PRODUCT

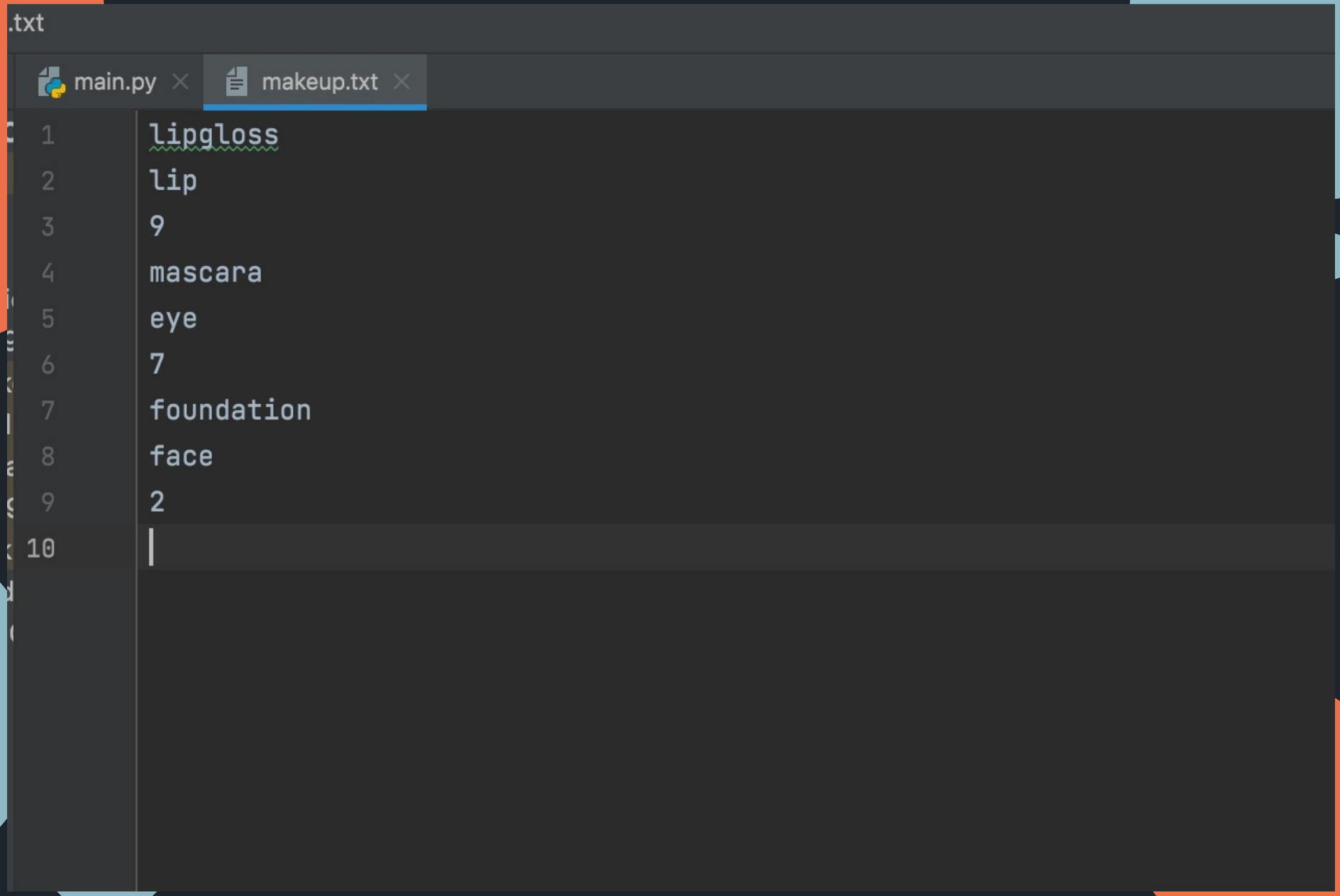
main.py | makeup.txt

```
145
146 def add():
147     makeup_file = open('makeup.txt','a')
148     answer = 'y'
149     while answer == 'y' or answer == 'Y':
150         makeup = str(input('Enter the name of the product:'))
151
152         type = str(input('Enter the type of the product (face,eye,lip):'))
153
154         quantity = str(input('Enter the quantity of the product:'))
155
156         print('')
157
158         makeup_file.write(str(makeup + '\n'))
159         makeup_file.write(str(type + '\n'))
160         makeup_file.write(str(quantity) + '\n')
161
162         answer = input('Do you want to add another product? (yes = y, no = n) ')
163
164     makeup_file.close()
165     print('The information has been saved in makeup.txt :)')
166
```

THE RUN

main

```
/Users/ameeraattiah/PycharmProjects/CS_project/venv/bin/python /Users/ameeraattiah/PycharmProjects/CS_project/main.py
Welcome to Sephora

Enter the Password:1234
The password is correct
Which option do you want to carry out:
1) Store item information: name, type, and quantity
2) Display all items from the same type
3) Edit one item quantity
4) Delete an item
5) Add an item
6) Sort items ascending or descending
7) Close the program

Enter your number here: 5
Enter the name of the product:mascara
Enter the type of the product (face,eye,lip):eye
Enter the quantity of the product:7

Do you want to add another product? (yes = y, no = n) y
Enter the name of the product:foundation
Enter the type of the product (face,eye,lip):face
Enter the quantity of the product:2

Do you want to add another product? (yes = y, no = n) n
The information has been saved in makeup.txt :)
Do you want to carry out another option? (yes = y, no = n) n
Closing the Program . . .

Process finished with exit code 0
```


.txt
main.py
makeup.txt
1 lipgloss
2 lip
3 9
4 mascara
5 eye
6 7
7 foundation
8 face
9 2
10

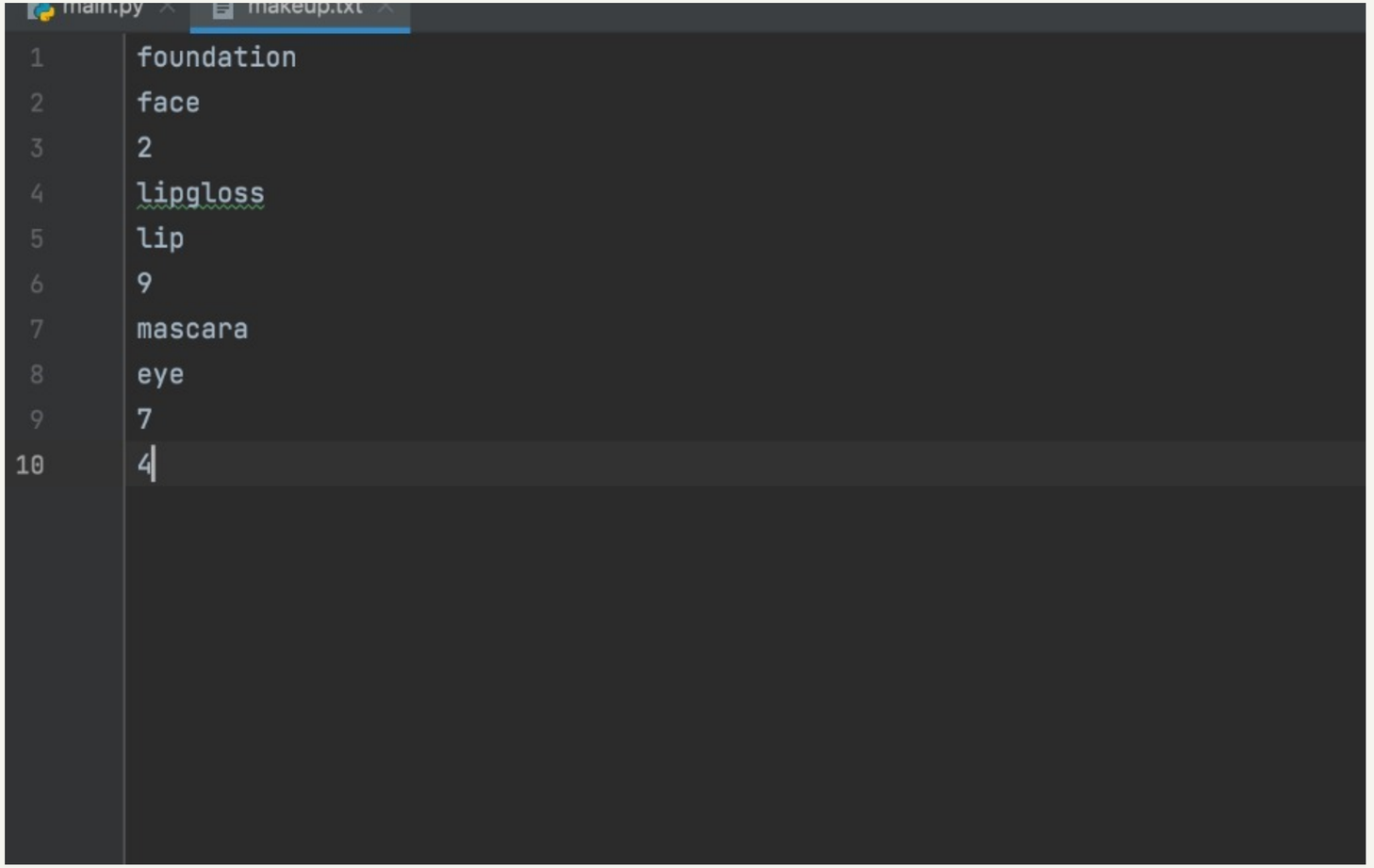
main.py makeup.txt

```
def sort():
    order = input('Choose between sorting in ascending or descending order: (a = ascending, d = descending) ')
    makeup_file = open('makeup.txt', 'r')

    name = (makeup_file.readline()).rstrip('\n')
    type = (makeup_file.readline()).rstrip('\n')
    quantity = (makeup_file.readline()).rstrip('\n')

    while name != '':
        makeup_list.append([name, type, quantity])

        name = (makeup_file.readline()).rstrip('\n')
        type = (makeup_file.readline()).rstrip('\n')
        quantity = (makeup_file.readline()).rstrip('\n')
    makeup_file.close()

    if order == 'a':
        makeup_list.sort()
    elif order == 'd':
        makeup_list.sort(reverse=True)

    rows = len(makeup_list)
    columns = len(makeup_list[0])

    temp_file = open('temporary.txt', 'w')
    for r in range(rows):
        for c in range(columns):
            temp_file.write(makeup_list[r][c] + '\n')
    temp_file.close()

    os.remove('makeup.txt')
    os.rename('temporary.txt', 'makeup.txt')
    print('Products have been sorted')
```

THIS FUNCTION IS FOR SORTING THE PRODUCTS IN EITHER ASCENDING OR DESCENDING ORDER, WHICH WOULD DEPEND ON WHAT THE USER WILL CHOOSE

THE RUN FOR ASCENDING ORDER

```
Enter the Password:1234
The password is correct
Which option do you want to carry out:
1) Store item information: name, type, and quantity
2) Display all items from the same type
3) Edit one item quantity
4) Delete an item
5) Add an item
6) Sort items ascending or descending
7) Close the program

Enter your number here: 6
Choose between sorting in ascending or descending order: (a = ascending, d = descending) a
Products have been sorted
Do you want to carry out another option? (yes = y, no = n) n
Closing the Program . . .

Process finished with exit code 0
```

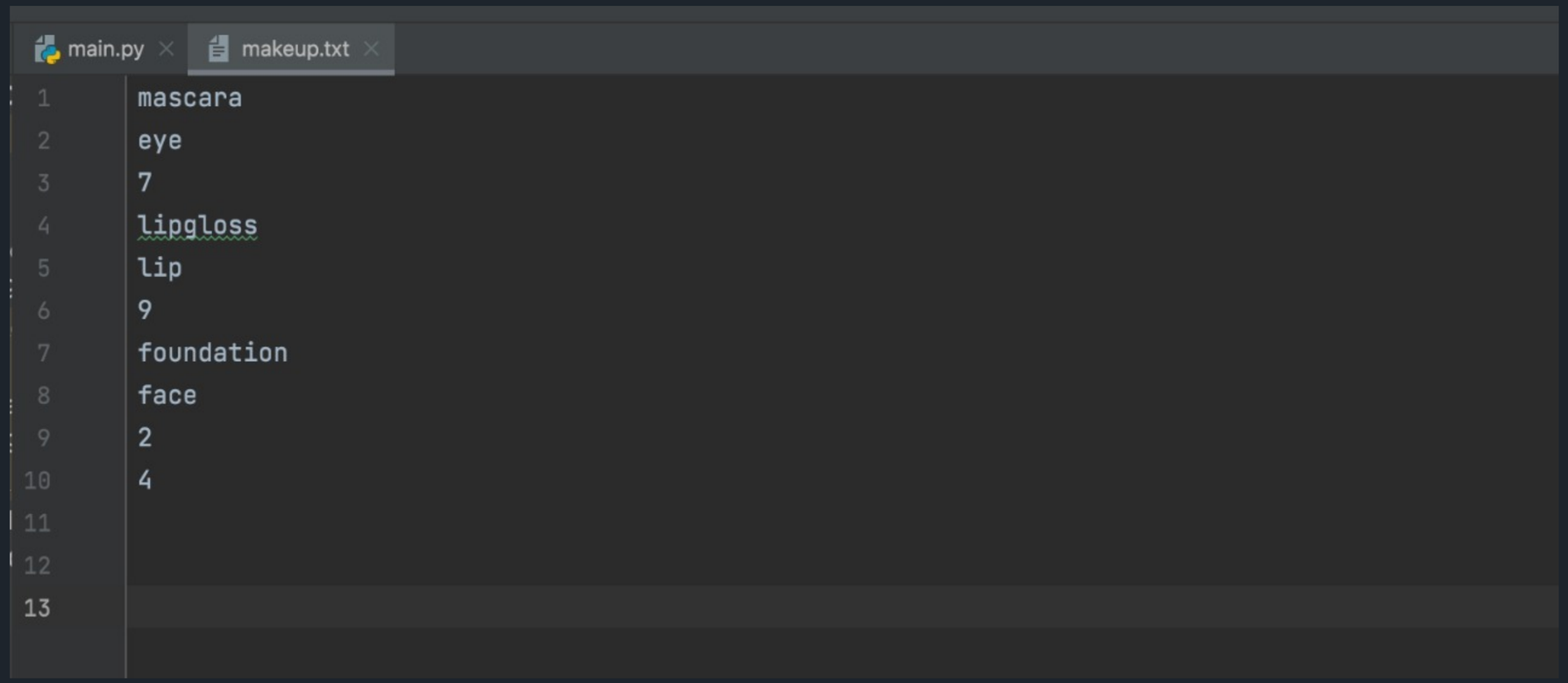


RUN IN THE FILE IN ASCENDING ORDER

```
Enter the Password:1234
The password is correct
Which option do you want to carry out:
1) Store item information: name, type, and quantity
2) Display all items from the same type
3) Edit one item quantity
4) Delete an item
5) Add an item
6) Sort items ascending or descending
7) Close the program

Enter your number here: 6
Choose between sorting in ascending or descending order: (a = ascending, d = descending) d
Products have been sorted
Do you want to carry out another option? (yes = y, no = n) n
Closing the Program . . .

Process finished with exit code 0
```

THE RUN FOR DESCENDING ORDER

IN THE FILE IN DESCENDING ORDER

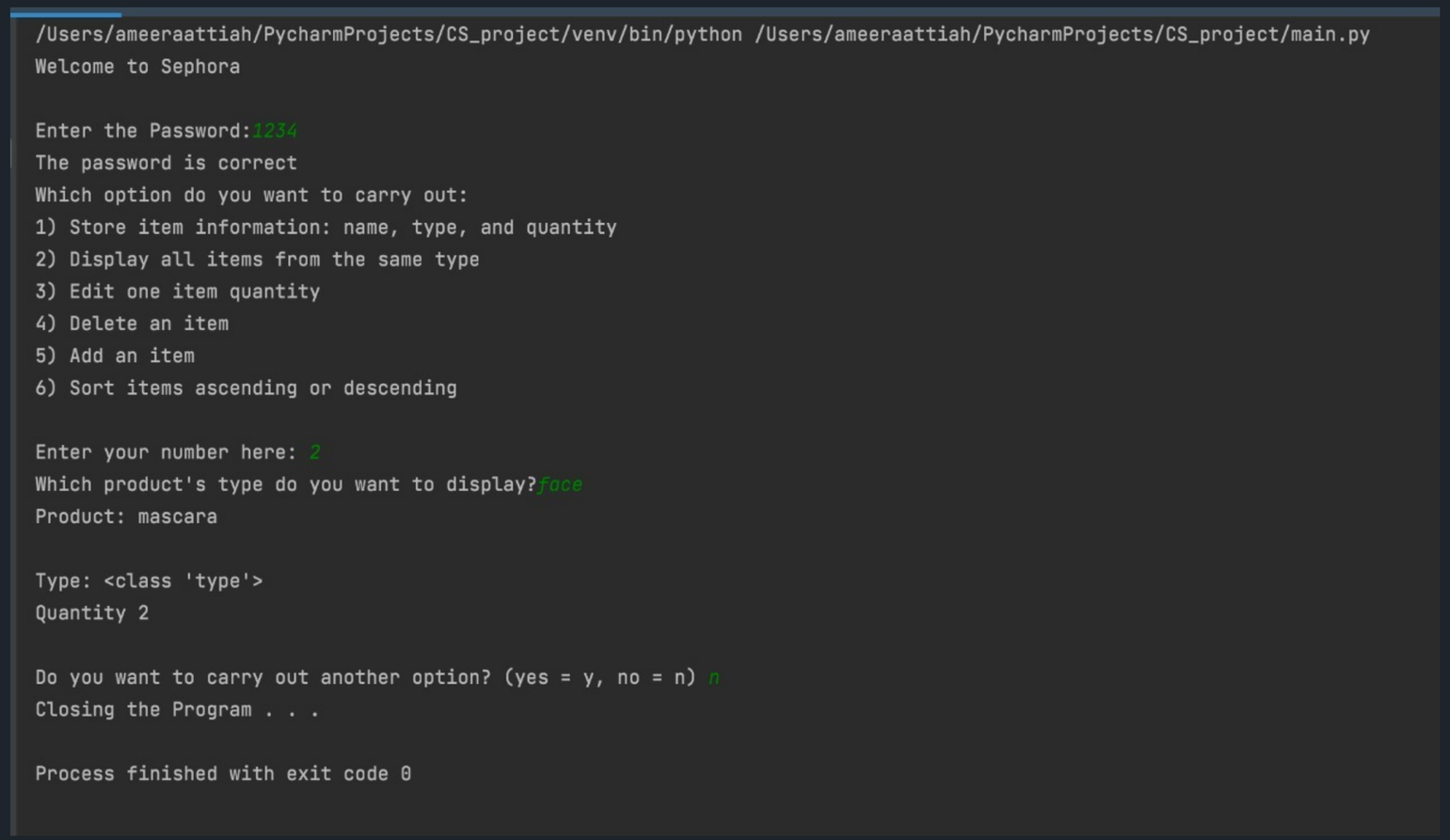


THE FUNCTION WHICH WOULD CLOSE THE PROGRAM

```
def exit_program():
    print('Closing the Program . . .')
```

```
def display():
    found = False
    search_type = str(input("Which product's type do you want to display?"))
    makeup_file = open('makeup.txt', 'r')
    makeup = makeup_file.readline()
    line = makeup_file.readline()
    while line != '':
        quantity = makeup_file.readline()
        line = line.rstrip('\n')
        if line == search_type:
            print('Product:', makeup)
            print('Type:', type)
            print('Quantity', quantity)
            found = True
        line = makeup_file.readline()
    makeup_file.close()
    if not found:
        print('That type was not avaliable')
```

THE DISPLAY FUNCTION



RUN FOR THE DISPLAY FUNCTION


Code
Final

```
IMPORT OS
OPTIONS_LIST = ("STORE ITEM INFORMATION.", "DISPLAY
ITEMS OF THE SAME TYPE.",
"EDIT AN ITEM.", "DELETE AN ITEM.", "ADD
AN ITEM.", "SORT ITEMS.")
MAKEUP_LIST = []

DEF LOG_IN():
PASSWORD = '1234'
ENTERED_PASSWORD = STR(INPUT('ENTER THE
PASSWORD:'))
WHILE ENTERED_PASSWORD != PASSWORD:
PRINT ('THE PASSWORD IS INCORRECT')
PRINT('')
ENTERED_PASSWORD = STR(INPUT('ENTER THE
PASSWORD AGAIN:'))
PRINT('THE PASSWORD IS CORRECT')

DEF CHOOSING_OPTION():
PRINT ('WHICH OPTION DO YOU WANT TO CARRY
OUT:\N'
'1) STORE ITEM INFORMATION: NAME,
TYPE, AND QUANTITY\N'
'2) DISPLAY ALL ITEMS FROM THE
SAME TYPE \N'
'3) EDIT ONE ITEM QUANTITY\N'
'4) DELETE AN ITEM\N'
'5) ADD AN ITEM\N'
'6) SORT ITEMS ASCENDING OR
DESCENDING\N')

CHOOSING_OPTION = INPUT('ENTER YOUR NUMBER
HERE: ')

IF CHOOSING_OPTION == '1':
STORE()
ELIF CHOOSING_OPTION == '2':
DISPLAY()
ELIF CHOOSING_OPTION == '3':
EDIT()
ELIF CHOOSING_OPTION == '4':
DELETE()
ELIF CHOOSING_OPTION == '5':
ADD()
ELIF CHOOSING_OPTION == '6':
SORT()
ELSE:
EXIT_PROGRAM()

DEF STORE():
MAKEUP_FILE = OPEN('MAKEUP.TXT', 'W')
PRINT('ENTER THE FOLLOWING DATA FOR
THE MAKEUP PRODUCTS:')
ANSWER = 'Y'

WHILE ANSWER == 'Y' OR ANSWER == 'Y':
MAKEUP = STR(INPUT('ENTER THE NAME OF THE PRODUCT:'))
TYPE = STR(INPUT('ENTER THE TYPE OF THE PRODUCT
(FACE,EYE,LIP):'))
QUANTITY = STR(INPUT('ENTER THE QUANTITY OF THE PRODUCT:'))
PRINT ('')

MAKEUP_FILE.WRITE(STR(MAKEUP + '\N'))
MAKEUP_FILE.WRITE(STR(TYPE + '\N'))
MAKEUP_FILE.WRITE (STR(QUANTITY) + '\N')

ANSWER = INPUT('DO YOU WANT TO ADD ANOTHER PRODUCT? (YES
= Y,NO = N)')

MAKEUP_FILE.CLOSE()
PRINT('THE INFORMATION HAS BEEN SAVED IN MAKEUP.TXT :)')

DEF DISPLAY():
FOUND = FALSE
```

```
SEARCH_TYPE = STR(INPUT("WHICH
PRODUCT'S TYPE DO YOU WANT TO
DISPLAY?"))
MAKEUP_FILE =
OPEN('MAKEUP.TXT','R')
MAKEUP = MAKEUP_FILE.READLINE()
LINE = MAKEUP_FILE.READLINE()
WHILE LINE != '':
QUANTITY =
MAKEUP_FILE.READLINE()
LINE = LINE.RSTRIP('\N')
IF LINE == SEARCH_TYPE:
PRINT('PRODUCT:',MAKEUP)
PRINT('TYPE:', TYPE)
PRINT('QUANTITY',QUANTITY)
FOUND = TRUE
LINE = MAKEUP_FILE.READLINE()
MAKEUP_FILE.CLOSE()
IF NOT FOUND:
PRINT('THAT TYPE WAS NOT
AVALIABLE')

DEF EDIT():
FOUND = FALSE
SEARCH = INPUT('ENTER A DESCRIPTION TO SEARCH FOR: ')
NEW_QUANTITY = INT(INPUT('ENTER THE NEW QUANTITY: '))

MAKEUP_FILE = OPEN('MAKEUP.TXT', 'R')
TEMP_FILE = OPEN('TEMP.TXT', 'W')

NAME = MAKEUP_FILE.READLINE()

WHILE NAME != '':
TYPE = MAKEUP_FILE.READLINE()
QUANTITY = MAKEUP_FILE.READLINE()
NAME = NAME.RSTRIP('\N')
TYPE = TYPE.RSTRIP('\N')
QUANTITY = QUANTITY.RSTRIP('\N')

IF NAME == SEARCH:
TEMP_FILE.WRITE(NAME + '\N')
TEMP_FILE.WRITE(TYPE + '\N')
TEMP_FILE.WRITE(STR(NEW_QUANTITY) + '\N')

FOUND = TRUE
ELSE:
TEMP_FILE.WRITE(NAME + '\N')
TEMP_FILE.WRITE(TYPE + '\N')
TEMP_FILE.WRITE(STR(QUANTITY) + '\N')

NAME = MAKEUP_FILE.READLINE()

MAKEUP_FILE.CLOSE()
TEMP_FILE.CLOSE()
OS.REMOVE('MAKEUP.TXT')
OS.RENAME('TEMP.TXT', 'MAKEUP.TXT')

IF FOUND:
PRINT('THE FILE HAS BEEN UPDATED.')
ELSE:
PRINT('THAT ITEM WAS NOT FOUND IN THE FILE.')

DEF DELETE():
FOUND = FALSE
SEARCH = INPUT('WHICH PRODUCT DO YOU WANT TO
DELETE? ')
MAKEUP_FILE = OPEN('MAKEUP.TXT', 'R')
TEMP_FILE = OPEN('TEMP.TXT','W')
DESCR = MAKEUP_FILE.READLINE()
WHILE DESCR != '':
QTY = STR(MAKEUP_FILE.READLINE())
DESCR = DESCR.RSTRIP('\N')
IF DESCR != SEARCH:
TEMP_FILE.WRITE(DESCR + '\N')
TEMP_FILE.WRITE(STR(QTY) + '\N')
ELSE:
FOUND = TRUE
DESCR = MAKEUP_FILE.READLINE()
MAKEUP_FILE.CLOSE()
TEMP_FILE.CLOSE()
OS.REMOVE('MAKEUP.TXT')
OS.RENAME('TEMP.TXT','MAKEUP.TXT')
IF FOUND:
PRINT('THE FILE HAS BEEN UPDATED.')
ELSE :
PRINT('THAT ITEM WAS NOT FOUND IN THE FILE.')

DEF ADD():
MAKEUP_FILE = OPEN('MAKEUP.TXT','A')
ANSWER = 'Y'
WHILE ANSWER == 'Y' OR ANSWER == 'Y':
MAKEUP = STR(INPUT('ENTER THE NAME OF THE
PRODUCT:'))

TYPE = STR(INPUT('ENTER THE TYPE OF THE PRODUCT
(FACE,EYE,LIP):'))

QUANTITY = STR(INPUT('ENTER THE QUANTITY OF THE
PRODUCT:'))

PRINT('')

MAKEUP_FILE.WRITE(STR(MAKEUP + '\N'))
MAKEUP_FILE.WRITE(STR(TYPE + '\N'))
MAKEUP_FILE.WRITE(STR(QUANTITY) + '\N')
```

```
ANSWER = INPUT('DO YOU WANT TO ADD
ANOTHER PRODUCT? (YES = Y, NO = N) ')

        MAKEUP_FILE.CLOSE()
 PRINT('THE INFORMATION HAS BEEN SAVED
        IN MAKEUP.TXT :)')

        DEF SORT():
 ORDER = INPUT('CHOOSE BETWEEN SORTING
IN ASCENDING OR DESCENDING ORDER: (A =
    ASCENDING, D = DESCENDING) ')
  MAKEUP_FILE = OPEN('MAKEUP.TXT', 'R')

            NAME =
(MAKEUP_FILE.READLINE()).RSTRIP('\N')
            TYPE =
(MAKEUP_FILE.READLINE()).RSTRIP('\N')
          QUANTITY =
(MAKEUP_FILE.READLINE()).RSTRIP('\N')

        WHILE NAME != '':
    MAKEUP_LIST.APPEND((NAME, TYPE,
            QUANTITY))

            NAME =
(MAKEUP_FILE.READLINE()).RSTRIP('\N')
            TYPE =
(MAKEUP_FILE.READLINE()).RSTRIP('\N')
          QUANTITY =
(MAKEUP_FILE.READLINE()).RSTRIP('\N')
        MAKEUP_FILE.CLOSE()

          IF ORDER == 'A':
          MAKEUP_LIST.SORT()
         ELIF ORDER == 'D':
    MAKEUP_LIST.SORT(REVERSE=TRUE)

       ROWS = LEN(MAKEUP_LIST)
    COLUMNS = LEN(MAKEUP_LIST(0))

  TEMP_FILE = OPEN('TEMPORARY.TXT', 'W')
        FOR R IN RANGE(ROWS):
        FOR C IN RANGE(COLUMNS):
    TEMP_FILE.WRITE(MAKEUP_LIST(R)(C) +
            '\N')
        TEMP_FILE.CLOSE()

       OS.REMOVE('MAKEUP.TXT')
OS.RENAME('TEMPORARY.TXT', 'MAKEUP.TXT')
   PRINT('PRODUCTS HAVE BEEN SORTED')

       DEF EXIT_PROGRAM():
    PRINT('CLOSING THE PROGRAM . . .')

          DEF MAIN():
    PRINT('WELCOME TO SEPHORA')
            PRINT('')
           LOG_IN()
         ANSWER = 'Y'
 WHILE ANSWER == 'Y' OR ANSWER == 'Y':
        CHOOSING_OPTION()
  ANSWER = INPUT('DO YOU WANT TO CARRY
OUT ANOTHER OPTION? (YES = Y, NO = N) ')

          EXIT_PROGRAM()

            MAIN()
```

THANKYOU