```
cbolat@DESKTOP-2J752DH:/mnt/c/Users/pc/Desktop/hw11/hw11$ make
-----------------------------------------
Removing compiled files...
-----------------------------------------
Compiling...
-----------------------------------------
Running the program....
===============================================================================
./hw11
*************************
1-Add Family Tree
2-Remove Family Tree
3-Load Family Tree
4-Exit
 >> 1
*************************
1-Add Node
2-Save Family Tree
3-Exit
 >> 1
Enter the name of the person: Cemal
Enter the age of the person: 77
Cemal has been added to the family tree successfully !
*************************
1-Add Node
2-Save Family Tree
3-Exit
 >> 1
Enter the name of the person: Ela
Enter the age of the person: 66
Enter the name of the mother: Gül
Enter the name of the father: Hasan
Ela has been added to the family tree successfully !
*************************
1-Add Node
2-Save Family Tree
3-Exit
 >> 1
Enter the name of the person: Emine
Enter the age of the person: 35
Enter the name of the mother: Ela
Enter the name of the father: Cemal
Emine has been added to the family tree successfully !
*************************
1-Add Node
2-Save Family Tree
3-Exit
 >> 1
Enter the name of the person: Şule
Enter the age of the person: 35
Enter the name of the mother: Ela
Enter the name of the father: Cemal
Şule has been added to the family tree successfully !
*************************
```

```
**************************
1-Add Node
2-Save Family Tree
3-Exit
 >> 1
Enter the name of the person: Ismail
Enter the age of the person: 40
Enter the name of the mother: Eylül
Enter the name of the father: Yusuf
Ismail has been added to the family tree successfully !
**************************
1-Add Node
2-Save Family Tree
3-Exit
 >> 1
Enter the name of the person: Ali
Enter the age of the person: 7
Enter the name of the mother: Emine
Enter the name of the father: Ismail
Ali has been added to the family tree successfully !
**************************
1-Add Node
2-Save Family Tree
3-Exit
 >> 2
Saving family tree to family3.txt...
family3.txt has been saved successfully...

Returning to main menu...
**************************
1-Add Family Tree
2-Remove Family Tree
3-Load Family Tree
4-Exit
 >> 4

Terminating...
================================================================================
[SUCCESS] Completed tests....
cbolat@DESKTOP-2J752DH:/mnt/c/Users/pc/Desktop/hw11/hw11$ cat family3
cat: family3: No such file or directory
cbolat@DESKTOP-2J752DH:/mnt/c/Users/pc/Desktop/hw11/hw11$ cat family3.txt
Name:Cemal,Age:77,Mother:NULL,Father:NULL
Name:Ela,Age:66,Mother:NULL,Father:NULL
Name:Emine,Age:35,Mother:Ela,Father:Cemal
Name:Şule,Age:35,Mother:Ela,Father:Cemal
Name:Ismail,Age:40,Mother:NULL,Father:NULL
Name:Ali,Age:7,Mother:Emine,Father:Ismail
cbolat@DESKTOP-2J752DH:/mnt/c/Users/pc/Desktop/hw11/hw11$ cat family3.txt
```

```
cbolat@DESKTOP-2J752DH:/mnt/c/Users/pc/Desktop/hw11/hw11$ ls
Screenshot_1.png  Screenshot_2.png  add_family_tree.c  family1.txt  family2.txt  family3.txt  hw11  load.c  main.c  makefile  menu.c  remove_family.c  search.c  util.c  util.h
cbolat@DESKTOP-2J752DH:/mnt/c/Users/pc/Desktop/hw11/hw11$ make
-------------------------------------------
Removing compiled files...
-------------------------------------------
Compiling...
-------------------------------------------
Running the program....
===========================================================
./hw11
***************************
1-Add Family Tree
2-Remove Family Tree
3-Load Family Tree
4-Exit
 >> 2
Enter the name of txt file of the family tree: family2.txt
family2.txt has been removed successfully...
Other files are shifting...
Shifting is done...
***************************
1-Add Family Tree
2-Remove Family Tree
3-Load Family Tree
4-Exit
 >> 4

Terminating...
===========================================================
[SUCCESS] Completed tests....
cbolat@DESKTOP-2J752DH:/mnt/c/Users/pc/Desktop/hw11/hw11$ ls
Screenshot_1.png  Screenshot_2.png  add_family_tree.c  family1.txt  family2.txt  hw11  load.c  main.c  makefile  menu.c  remove_family.c  search.c  util.c  util.h
```
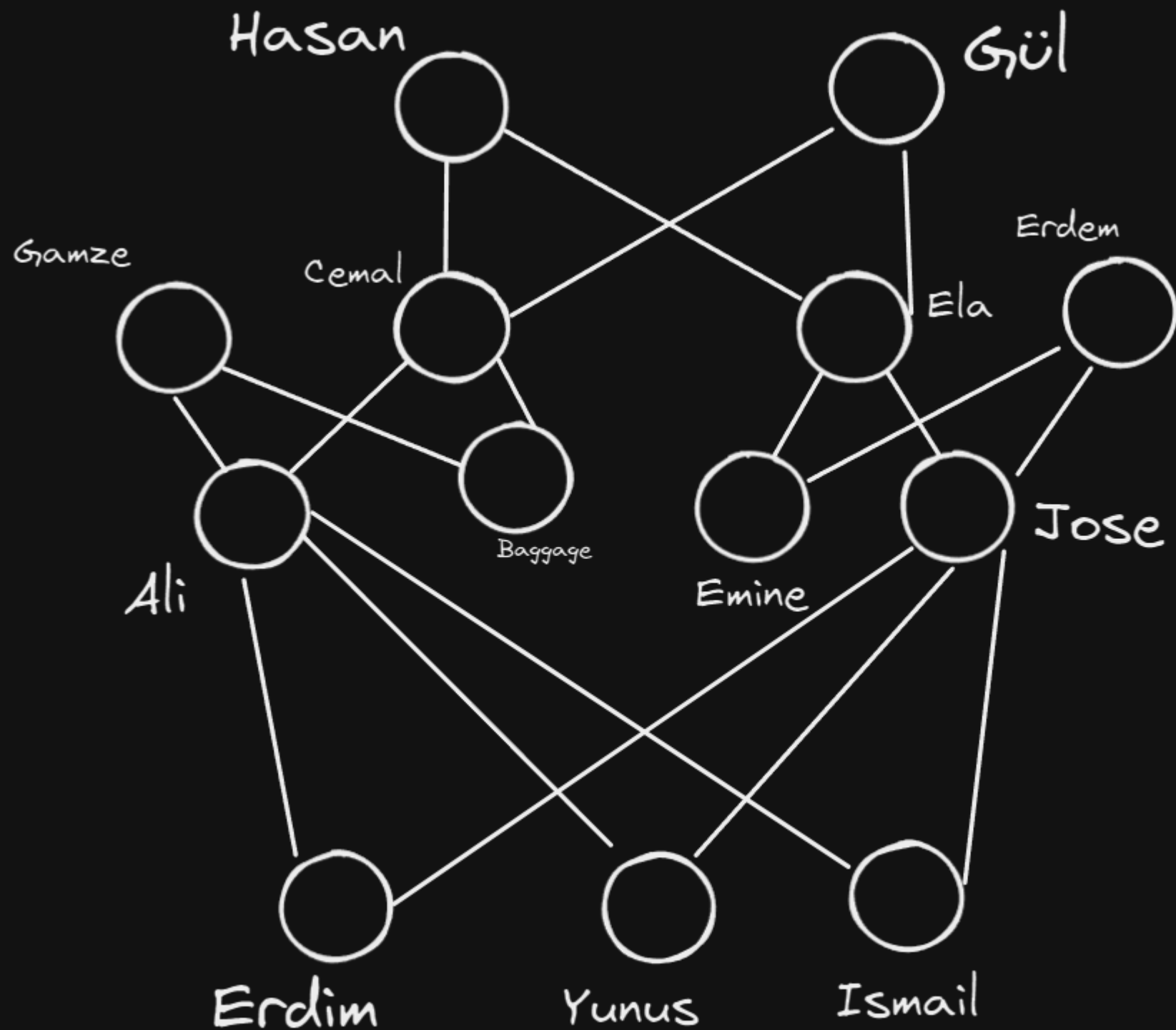
After deleting family2.txt file
The other ones family3.txt file became the family2.txt
if we had family4.txt file it would also became family3.txt file

Screenshot_1.png Screenshot_2.png add_family_tree.c family1.txt family2.txt hw11 load.c main.c makefile menu.c remove_family.c search.c util.c util.h
cbolat@DESKTOP-2J752DH:/mnt/c/Users/pc/Desktop/hw11/hw11$ cat family2.txt
Name:Cemal,Age:77,Mother:NULL,Father:NULL
Name:Ela,Age:66,Mother:NULL,Father:NULL
Name:Emine,Age:35,Mother:Ela,Father:Cemal
Name:Şule,Age:35,Mother:Ela,Father:Cemal
Name:Ismail,Age:40,Mother:NULL,Father:NULL
Name:Ali,Age:7,Mother:Emine,Father:Ismail

It was recorded as family3.txt but after I deleted family2.txt this file shifted to family2.txt

Hasan

Gül

Erdem

Gamze

Cemal

Ela

Ali

Baggage

Jose

Emine

Erdim

Yunus

Ismail

```
cbolat@DESKTOP-2J752DH:/mnt/c/Users/pc/Desktop/hw11/hw11$ cat family1.txt
Name:Hasan,Age:45,Mother:NULL,Father:NULL
Name:Gül,Age:47,Mother:NULL,Father:NULL
Name:Ela,Age:42,Mother:Gül,Father:Hasan
Name:Cemal,Age:44,Mother:Gül,Father:Hasan
Name:Gamze,Age:40,Mother:NULL,Father:NULL
Name:Erdem,Age:41,Mother:NULL,Father:NULL
Name:Ali,Age:41,Mother:Gamze,Father:Cemal
Name:Jose,Age:41,Mother:Ela,Father:Erdem
Name:Emine,Age:41,Mother:Ela,Father:Erdem
Name:Erdim,Age:41,Mother:Ali,Father:Jose
Name:Yunus,Age:41,Mother:Ali,Father:Jose
Name:Ismail,Age:8,Mother:Ali,Father:Jose
Name:Baggage,Age:7,Mother:Gamze,Father:Cemal
Name:Nurdan,Age:2,Mother:Gamze,Father:Cemal
cbolat@DESKTOP-2J752DH:/mnt/c/Users/pc/Desktop/hw11/hw11$ make
------------------------------------------
Removing compiled files...
------------------------------------------
Compiling...
------------------------------------------
Running the program....
==========================================================================
./hw11
**************************
1-Add Family Tree
2-Remove Family Tree
3-Load Family Tree
4-Exit
 >> 3
Listing Family Trees:
1-family1.txt
2-family2.txt
 >> 1
family1.txt has been selected
**************************
Select an operation:
1-Add new person
2-Remove a person
3-Print a Person's nuclear family
4-Search Relatives of Given Person
5-Return to the main menu
 >> 1
Enter the name of the person: Nuran
Enter the age of the person: 1
Enter the name of the mother: Gamze
Enter the name of the father: Cemal
Nuran has been added to the family tree successfully !
**************************
Select an operation:
1-Add new person
2-Remove a person
3-Print a Person's nuclear family
4-Search Relatives of Given Person
5-Return to the main menu
 >> 5

Returning to the main menu...
family1.txt has been saved successfully...
**************************
```

```
*************************
1-Add Family Tree
2-Remove Family Tree
3-Load Family Tree
4-Exit
 >> 4

Terminating...
=======================================================================
[SUCCESS] Completed tests....
cbolat@DESKTOP-2J752DH:/mnt/c/Users/pc/Desktop/hw11/hw11$ cat family1.txt
Name:Hasan,Age:45,Mother:NULL,Father:NULL
Name:Gül,Age:47,Mother:NULL,Father:NULL
Name:Ela,Age:42,Mother:Gül,Father:Hasan
Name:Cemal,Age:44,Mother:Gül,Father:Hasan
Name:Gamze,Age:40,Mother:NULL,Father:NULL
Name:Erdem,Age:41,Mother:NULL,Father:NULL
Name:Ali,Age:41,Mother:Gamze,Father:Cemal
Name:Jose,Age:41,Mother:Ela,Father:Erdem
Name:Emine,Age:41,Mother:Ela,Father:Erdem
Name:Erdim,Age:41,Mother:Ali,Father:Jose
Name:Yunus,Age:41,Mother:Ali,Father:Jose
Name:Ismail,Age:8,Mother:Ali,Father:Jose
Name:Baggage,Age:7,Mother:Gamze,Father:Cemal
Name:Nurdan,Age:2,Mother:Gamze,Father:Cemal
Name:Nuran,Age:1,Mother:Gamze,Father:Cemal
cbolat@DESKTOP-2J752DH:/mnt/c/Users/pc/Desktop/hw11/hw11$
```

```
cbolat@DESKTOP-2J752DH:/mnt/c/Users/pc/Desktop/hw11/hw11$ make
-----------------------------------------
Removing compiled files...
-----------------------------------------
Compiling...
-----------------------------------------
Running the program....
==================================================================
./hw11
**************************
1-Add Family Tree
2-Remove Family Tree
3-Load Family Tree
4-Exit
 >> 3
Listing Family Trees:
1-family1.txt
2-family2.txt
 >> 1
family1.txt has been selected
**************************
Select an operation:
1-Add new person
2-Remove a person
3-Print a Person's nuclear family
4-Search Relatives of Given Person
5-Return to the main menu
 >> 3
Enter the name of the person: Ali
Printing nuclear family of Ali
Father: Cemal
Mother: Gamze
Siblings: Baggage Nurdan Nuran
Children: Erdim Yunus Ismail
**************************
Select an operation:
1-Add new person
2-Remove a person
3-Print a Person's nuclear family
4-Search Relatives of Given Person
5-Return to the main menu
 >> 4
Enter the name of the person: Ali
**************************
Select type of relatives:
1-Parents
2-Spouse
3-Children
4-Grandparents
5-Cousins
 >> 1
Printing parents of Ali
Mother: Gamze
Father: Cemal
```

```
*************************
Select an operation:
1-Add new person
2-Remove a person
3-Print a Person's nuclear family
4-Search Relatives of Given Person
5-Return to the main menu
 >> 4
Enter the name of the person: Ali
*************************
Select type of relatives:
1-Parents
2-Spouse
3-Children
4-Grandparents
5-Cousins
 >> 2
Printing spouse of Ali
Spouse: Jose
*************************
Select an operation:
1-Add new person
2-Remove a person
3-Print a Person's nuclear family
4-Search Relatives of Given Person
5-Return to the main menu
 >> 4
Enter the name of the person: Cemal
*************************
Select type of relatives:
1-Parents
2-Spouse
3-Children
4-Grandparents
5-Cousins
 >> 3
Printing children of Cemal
Children: Ali Baggage Nurdan Nuran
*************************
Select an operation:
1-Add new person
2-Remove a person
3-Print a Person's nuclear family
4-Search Relatives of Given Person
5-Return to the main menu
 >> 4
Enter the name of the person: Baggage
*************************
```

```
*************************
Select type of relatives:
1-Parents
2-Spouse
3-Children
4-Grandparents
5-Cousins
 >> 4
Printing grandparents of Baggage
Maternal Grandmother: None
Maternal Grandfather: None
Paternal Grandmother: Gül
Paternal Grandfather: Hasan
*************************
Select an operation:
1-Add new person
2-Remove a person
3-Print a Person's nuclear family
4-Search Relatives of Given Person
5-Return to the main menu
 >> 4
Enter the name of the person: Baggage
*************************
Select type of relatives:
1-Parents
2-Spouse
3-Children
4-Grandparents
5-Cousins
 >> 5
Printing cousins of Baggage
Cousins: Jose Erdim
*************************
Select an operation:
1-Add new person
2-Remove a person
3-Print a Person's nuclear family
4-Search Relatives of Given Person
5-Return to the main menu
 >> 5

Returning to the main menu...
family1.txt has been saved successfully...
*************************
1-Add Family Tree
2-Remove Family Tree
3-Load Family Tree
4-Exit
 >> 4

Terminating...
```

```
*************************
1-Add Family Tree
2-Remove Family Tree
3-Load Family Tree
4-Exit
 >> 3
Listing Family Trees:
1-family1.txt
2-family2.txt
 >> 1
family1.txt has been selected
*************************
Select an operation:
1-Add new person
2-Remove a person
3-Print a Person's nuclear family
4-Search Relatives of Given Person
5-Return to the main menu
 >> 2
Enter the name of the person to remove: Ali
Warning: Ali has children, removing Ali will also remove their children.
Do you still want to continue (yes / no) : yes
Ali and their children will be removed from the family tree.
*************************
Select an operation:
1-Add new person
2-Remove a person
3-Print a Person's nuclear family
4-Search Relatives of Given Person
5-Return to the main menu
 >> 5

Returning to the main menu...
family1.txt has been saved successfully...
*************************
1-Add Family Tree
2-Remove Family Tree
3-Load Family Tree
4-Exit
 >> 4

Terminating...
================================================================================
[SUCCESS] Completed tests....
cbolat@DESKTOP-2J752DH:/mnt/c/Users/pc/Desktop/hw11/hw11$ cat family1.txt
Name:Hasan,Age:45,Mother:NULL,Father:NULL
Name:Gül,Age:47,Mother:NULL,Father:NULL
Name:Ela,Age:42,Mother:Gül,Father:Hasan
Name:Cemal,Age:44,Mother:Gül,Father:Hasan
Name:Gamze,Age:40,Mother:NULL,Father:NULL
Name:Erdem,Age:41,Mother:NULL,Father:NULL
Name:Jose,Age:41,Mother:Ela,Father:Erdem
Name:Emine,Age:41,Mother:Ela,Father:Erdem
Name:Baggage,Age:7,Mother:Gamze,Father:Cemal
Name:Nurdan,Age:2,Mother:Gamze,Father:Cemal
Name:Nuran,Age:1,Mother:Gamze,Father:Cemal
```