

```
In [1]: name = input("What's your name?")
        print(f"Hello {name}")
```

Hello Priya

```
In [2]: names = [] ## empty list

        for i in range(3):
            names.append(input("What's your name?"))

        ## sort in alphabetic order
        for name in sorted(names):
            print(f"Hello {name}")
```

Hello David
Hello Priya
Hello Sree

If I run this program again , all of the names are lost

open - `open()` function is used to interact with files. It allows you to open a file and returns a file object, which you can then use to read from, write to, or perform other operations on the file

the primary way to "close" a resource, especially files, is by using the `close()` method.

```
In [9]: name = input("What's your name?")

        file = open("names.txt", "w")
        file.write(name)
        file.close()
```

The names are not being saved when I run the program again.

```
In [13]: name = input("What's your name?")

        file = open("names.txt", "a")    # 'a' = append mode
        file.write(f"{name} \n")

        file = open("names.txt", "r")
        print(file.read())
```

DavidDavid
Priya
Sree
Diviya

```
In [14]: ## Alternative Methods for Saving Data Without Using the Close Method
        name = input("What's your name?")

        with open("names.txt", "a") as file:
            file.write(f"{name} \n")
```

```
with open("names.txt", "r") as file:
    print(file.read())
```

DavidDavid
Priya
Sree
Diviya
Sree

```
In [15]: name = input("What's your name?")
with open("names.txt", "a") as file:
    file.write(f"{name}\n")

with open("names.txt", "r") as file:
    lines = file.readlines()

for line in lines:
    print("hello ", line.strip())
```

hello DavidDavid
hello Priya
hello Sree
hello Diviya
hello Sree
hello Vishnu

```
In [16]: ## sorting the names
names = []

with open("names.txt") as file:
    for line in file:
        names.append(line.strip())

for name in sorted(names):
    print(f"hello {name}")
```

hello DavidDavid
hello Diviya
hello Priya
hello Sree
hello Sree
hello Vishnu

OR

```
In [17]: with open("names.txt") as file:
    for line in sorted(file):
        print(f"hello", line.rstrip())
```

hello DavidDavid
hello Diviya
hello Priya
hello Sree
hello Sree
hello Vishnu

```
In [18]: with open("names.txt") as file:
         for line in sorted(file, reverse=True):
             print(f"hello",line.rstrip())
```

```
hello Vishnu
hello Sree
hello Sree
hello Priya
hello Diviya
hello DavidDavid
```

Store the information of the students

```
In [22]: info = input("Your details:")

         with open("info.csv","a") as file:
             file.write(f"{info} \n")

         with open("info.csv", "r") as file:
             print(file.read())
```

```
Fathima , Begur
Priya, Akshya Nagar
Sreepriya,Begur
```

```
In [ ]: ## Accesing the information
```

```
In [23]: with open("info.csv","r") as file:
         for line in file:
             row = line.rstrip().split(",")
             print(f"{row[0]} is in {row[1]}")
```

```
Fathima is in Begur
Priya is in Akshya Nagar
Sreepriya is in Begur
```

```
In [24]: with open("info.csv","r") as file:
         for line in file:
             name , house = line.rstrip().split(",")
             print(f"{name} is in {house}")
```

```
Fathima is in Begur
Priya is in Akshya Nagar
Sreepriya is in Begur
```

```
In [25]: ## sort
         with open("info.csv","r") as file:
             for line in sorted(file):
                 name , house = line.rstrip().split(",")
                 print(f"{name} is in {house}")
```

```
Fathima is in Begur
Priya is in Akshya Nagar
Sreepriya is in Begur
```

```
In [26]: students = []

with open("info.csv","r") as file:
    for line in file:
        name , house = line.rstrip().split(",")
        student = {"name":name , "house":house}
        students.append(student)

for student in sorted(students, key=lambda student:student["house"]):
    print(f"{student['name']} is in {student['house']}")
```

Priya is in Akshya Nagar
 Fathima is in Begur
 Sreepriya is in Begur

```
In [27]: students = []

with open("info.csv","r") as file:
    for line in file:
        name , house = line.rstrip().split(",")
        student = {"name":name , "house":house}
        students.append(student)

for student in sorted(students, key=lambda student:student["name"]):
    print(f"{student['name']} is in {student['house']}")
```

Fathima is in Begur
 Priya is in Akshya Nagar
 Sreepriya is in Begur

```
In [28]: import csv

students = []

with open("info.csv","r") as file:
    reader=csv.reader(file)
    for name,home in reader:
        students.append({"name":name , "house":home})

for student in sorted(students, key=lambda student:student["name"]):
    print(f"{student['name']} is in {student['house']}")
```

Fathima is in Begur
 Priya is in Akshya Nagar
 Sreepriya is in Begur

```
In [78]: inform = input("Your details:")

with open("inform.csv","a") as file:
    file.write(f"{inform} \n")

with open("inform.csv", "r") as file:
    print(file.read())
```

Priya,"14th Main, Begur"
Sree,AKSHYA NAGAR
Diviya,"5TH CROSS, MP"

```
In [79]: with open("inform.csv","r") as file:
        for line in file:
            name , house = line.rstrip().split(",")
            print(f"{name} is in {house}")
```

```
-----
ValueError                                Traceback (most recent call last)
Cell In[79], line 3
      1 with open("inform.csv","r") as file:
      2     for line in file:
----> 3         name , house = line.rstrip().split(",")
      4         print(f"{name} is in {house}")

ValueError: too many values to unpack (expected 2)
```

```
In [80]: import csv

informs = []

with open("inform.csv") as file:
    reader=csv.reader(file)
    for row in reader:
        informs.append({"name":row[0] ,"home":row[1]})

for information in sorted(informs, key=lambda information:information["name"]):
    print(f"{information['name']} is in {information['home']}")
```

Diviya is in 5TH CROSS, MP
Priya is in 14th Main, Begur
Sree is in AKSHYA NAGAR

```
In [81]: import csv

informs = []

with open("inform.csv") as file:
    reader=csv.reader(file)
    for name,home in reader:
        informs.append({"name":name ,"home":home})

for information in sorted(informs, key=lambda information:information["name"]):
    print(f"{information['name']} is in {information['home']}")
```

Diviya is in 5TH CROSS, MP
Priya is in 14th Main, Begur
Sree is in AKSHYA NAGAR

```
In [84]: informa = input("Your details:")

with open("informa.csv","a") as file:
    file.write(f"{informa} \n")
```

```
with open("informa.csv", "r") as file:
    print(file.read())
```

home,name
 "5TH CROSS, MP",Diviya
 "14th Main, Begur", Priya

In [95]: **import** csv

```
informas = []

with open("informa.csv") as file:
    reader=csv.reader(file)
    for name,home in reader:
        informas.append({"name":name , "home":home})

for information in sorted(informas, key=lambda information:information["name"]):
    print(f"{information['name']} is in {information['home']}")
```

14th Main, Begur is in Priya
 5TH CROSS, MP is in Diviya
 home is in name

In [100...

```
import csv

informas = []

with open("informa.csv") as file:
    reader = csv.DictReader(file)
    # Normalize headers (strip spaces, lowercase)
    reader.fieldnames = [h.strip().lower() for h in reader.fieldnames]

    for row in reader:
        informas.append({"name": row["name"].strip(), "home": row["home"].strip()})

for info in sorted(informas, key=lambda x: x["name"]):
    print(f"{info['name']} is in {info['home']}")
```

Diviya is in 5TH CROSS, MP
 Priya is in 14th Main, Begur

OR

In [111...

```
import csv

informas = []

with open("informa.csv") as file:
    reader = csv.DictReader(file, fieldnames=["home", "name"])

    for row in reader:
        informas.append({"name": row["name"], "home": row["home"]})

for info in sorted(informas, key=lambda x: x["name"]):
    print(f"{info['name']} is in {info['home']}")
```

Priya is in 14th Main, Begur
Diviya is in 5TH CROSS, MP
name is in home

```
In [104... import csv

name=input("what's your name?:")
home=input("whers's your house?:")

with open("stu.csv","a") as file:
    writer = csv.writer(file)
    writer.writerow([name,home])    ## Here in the home, I didn't use double
```

```
In [105... with open("stu.csv", "r") as file:
    print(file.read())    ## assigns double quotes for the home
```

Sree," 5TH CROSS, MP"

Diviya,"14th Main, Begur"

SREE,"5th main, akshyanagar"

```
In [107... import csv

name=input("what's your name?:")
home=input("whers's your house?:")

with open("stu.csv","a") as file:
    writer = csv.DictWriter(file,fieldnames=["name","home"])
    writer.writerow({"name":name , "home":home})
```

```
In [108... with open("stu.csv", "r") as file:
    print(file.read())
```

Sree," 5TH CROSS, MP"

Diviya,"14th Main, Begur"

SREE,"5th main, akshyanagar"

Divya,Shivajinagar