PYTHON SUMMER PROJECT

Student Management System

Q) Accept the student details and store in file. Display the contents when asked. Using the contents of the file you should be able to search for records of students, add marks for each student, check for the fee dues, etc…

ANS) <u>CODE:</u>

```python
def a(file):

    file = open("student.txt", "r")

    name = input("Enter the name of the student whose records are to be found:")

    name = name.lower()

    name = name.capitalize()

    for line in file:

        for words in line.split():

            if name == words:

                print (line)

    file.close()

def b(file):

    file = open("student.txt", "a")

    limit = int(input("Enter the number of records to be added:"))

    for i in range(limit):

        rollno = input("Enter roll number:")
```

```python
name = input("Enter name:")

sub = input("Enter subject:")

marks = input("Enter marks:")

fee = input("Enter fee status:")

attendance = input("Enter attendance percentage:")

file.write(rollno)

file.write("\t")

file.write("\t")

file.write(name)

file.write("\t")

file.write("\t")

file.write(sub)

file.write("\t")

file.write("\t")

file.write(marks)

file.write("\t")

file.write("\t")

file.write(fee)

file.write("\t")

file.write("\t")

file.write(attendance + "%")

file.write("\n")
file.close()
```

```python
    file = open("student.txt", "r")

    text = file.read()

    print ("ROLL NO" + "\t" + "\t" + "NAME" + "\t" + "\t" + "SUBJECT" + "\t" + "\t"
+ "MARKS" + "\t" + "\t" + "FEE STATUS" + "\t"+ "\t" + "ATTENDANCE%" + "\n")

    print (text)

    file.close()
def c(file):

    file = open("student.txt", "r")

    for line in file:

        for words in line.split():

            if "incomplete" in words:

                print (line)

    file.close()
def menu():

    print ("MENU:")

    print ("a) looking up a student's record (nothing will show if the given
student's record does not exist)")

    print ("b) adding records to existing file")

    print ("c) displaying record of students whose fees are incomplete (nothing
will show if no student's fees are incomplete)")

    file = open("student.txt", "r")

    choice = input("Do you want to execute any of the above menu options?
(y/n):")

    while choice=="y" or choice=="Y":

        menu = input("Enter option to be executed:")
```

```python
        if menu=="a" or menu=="A":

            a(file)

        elif menu=="b" or menu=="B":

            b(file)

        elif menu=="c" or menu=="C":

            c(file)

        else:

            print ("Invalid input")

        choice=input("Do you want to continue? (y/n):")

    file.close()
def show(file):

    file = open("student.txt", "r")

    choice = input("Do you want to see the records? (y/n):")

    print ("ROLL NO" + "\t" + "\t" + "NAME" + "\t" + "\t" + "SUBJECT" + "\t" +
"\t"+ "MARKS" + "\t" + "\t" + "FEE STATUS" + "\t" + "\t" + "ATTENDANCE%" +
"\n")

    if choice=="y" or choice=="Y":

        text = file.read()

        print (text)

        choice = 'n'

    file.close()

    menu()
def writing():

    file = open("student.txt", "w")
```

```python
limit = int(input("Enter a limit:"))

for i in range(limit):

    rollno = input("Enter roll number:")

    name = input("Enter name:")

    sub = input("Enter subject:")

    marks = input("Enter marks:")

    fee = input("Enter fee status:")

    attendance = input("Enter attendance percentage:")

    file.write(rollno)

    file.write("\t")

    file.write("\t")

    file.write(name)

    file.write("\t")

    file.write("\t")

    file.write(sub)

    file.write("\t")

    file.write("\t")

    file.write(marks)

    file.write("\t")

    file.write("\t")

    file.write(fee)

    file.write("\t")

    file.write("\t")
```
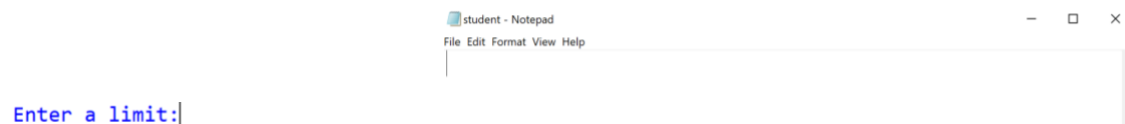
file.write(attendance + "%")

file.write("\n")

file.close()

show(file)

writing()

OUTPUT:

- Step-by-Step output:

#initially when no information is entered, i.e. when the program has just started.


```
student - Notepad                                    —  □  ×
File Edit Format View Help
|

Enter a limit:|
```

#when information is entered.

```
Enter a limit:2
Enter roll number:1001
Enter name:Ankit
Enter subject:Physics
Enter marks:98
Enter fee status:complete
Enter attendance percentage:87
Enter roll number:1002
Enter name:Rekha
Enter subject:Python
Enter marks:77
Enter fee status:incomplete
Enter attendance percentage:98
Do you want to see the records? (y/n):y
ROLL NO          NAME           SUBJECT        MARKS          FEE STATUS          ATTENDANCE%

1001             Ankit          Physics        98             complete            87%
1002             Rekha          Python         77             incomplete          98%

MENU:
a)looking up a student's record(nothing will show if the given student's record does not exist)
b)adding records to existing file
c)displaying record of students whose fees are incomplete (nothing will show if no student's fees are incomplete)
Do you want to execute any of the above menu options? (y/n):|
```
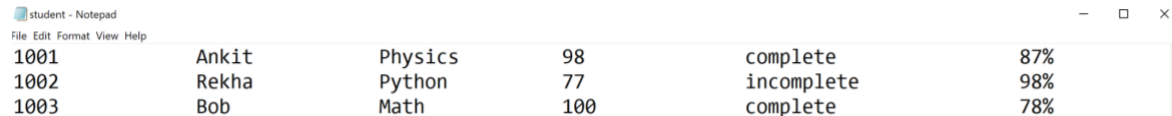
```
student - Notepad                                    —  □  ×
File Edit Format View Help
1001             Ankit          Physics        98             complete            87%
1002             Rekha          Python         77             incomplete          98%
```

#when information is added to existing file.

```
MENU:
a)looking up a student's record(nothing will show if the given student's record does not exist)
b)adding records to existing file
c)displaying record of students whose fees are incomplete (nothing will show if no student's fees are incomplete)
Do you want to execute any of the above menu options? (y/n):y
Enter option to be executed:B
Enter the number of records to be added:1
Enter roll number:1003
Enter name:Bob
Enter subject:Math
Enter marks:100
Enter fee status:complete
Enter attendance percentage:78
ROLL NO         NAME          SUBJECT       MARKS        FEE STATUS         ATTENDANCE%

1001            Ankit         Physics       98           complete           87%
1002            Rekha         Python        77           incomplete         98%
1003            Bob           Math          100          complete           78%

Do you want to continue? (y/n):
```

student - Notepad   — ☐ ✕
File Edit Format View Help

```
1001        Ankit         Physics       98           complete         87%
1002        Rekha         Python        77           incomplete       98%
1003        Bob           Math          100          complete         78%
```

- ## Final output:

```
Enter a limit:2
Enter roll number:1001
Enter name:Ankit
Enter subject:Physics
Enter marks:98
Enter fee status:complete
Enter attendance percentage:87
Enter roll number:1002
Enter name:Rekha
Enter subject:Python
Enter marks:77
Enter fee status:incomplete
Enter attendance percentage:98
Do you want to see the records? (y/n):y
ROLL NO         NAME          SUBJECT       MARKS        FEE STATUS         ATTENDANCE%

1001            Ankit         Physics       98           complete           87%
1002            Rekha         Python        77           incomplete         98%

MENU:
a)looking up a student's record (nothing will show if the given student's record does not exist)
b)adding records to existing file
c)displaying record of students whose fees are incomplete (nothing will show if no student's fees are incomplete)
Do you want to execute any of the above menu options? (y/n):y
Enter option to be executed:A
Enter the name of the student whose records are to be found:Ankit
1001            Ankit         Physics       98           complete           87%

Do you want to continue? (y/n):y
Enter option to be executed:a
Enter the name of the student whose records are to be found:reKhA
1002            Rekha         Python        77           incomplete         98%

Do you want to continue? (y/n):y
Enter option to be executed:B
Enter the number of records to be added:1
Enter roll number:1003
Enter name:Bob
Enter subject:Math
Enter marks:100
Enter fee status:complete
Enter attendance percentage:78
ROLL NO         NAME          SUBJECT       MARKS        FEE STATUS         ATTENDANCE%

1001            Ankit         Physics       98           complete           87%
1002            Rekha         Python        77           incomplete         98%
1003            Bob           Math          100          complete           78%

Do you want to continue? (y/n):Y
Enter option to be executed:c
1002            Rekha         Python        77           incomplete         98%

Do you want to continue? (y/n):n
>>>
```
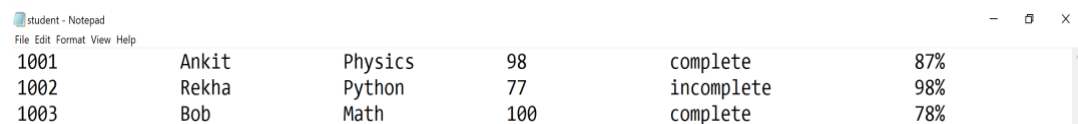
student - Notepad   — ⯗ ✕
File Edit Format View Help

```
1001        Ankit         Physics       98           complete         87%
1002        Rekha         Python        77           incomplete       98%
1003        Bob           Math          100          complete         78%
```