Python – Experiment 5

AIM : File handling, GUI and database in Python

LO - 5 : Gain proficiency in writing File Handling programs ,also create GUI applications and evaluate database operations in python.

   a) Different File Handling operations in Python

Code:

```
file = open("soham.txt","w")
file.write("My name is soham\n")
file.write("This is a sample written text")
file.close()

f = open("soham.txt")
c = f.read(4)
print(c)
print(f.readline(),end="")
print(f.tell())
print(f.seek(0))
print(f.readline(),end="")
f.close()

with open("soham.txt") as f:
    print(f.readline(),end="")
    print(f.tell())
    print(f.seek(0))
    print(f.readline(),end="")
```

Output:

```
My n
ame is soham
18
0
My name is soham
My name is soham
18
0
My name is soham
```

```
My name is soham
This is a sample written text
```

b) Designing Graphical user interface (GUI) using built-in tools PyQt and GUI database connectivity to perform CRUD operations in python.

Code:

```
import sys
from PyQt5.QtWidgets import *
dic = {}

def main():
    app = QApplication(sys.argv)
    w = QWidget()
    w.resize(500,500)

    layout = QGridLayout()
    productLabel = QLabel("Item name:")
    costLabel = QLabel("Cost:")
    prodLine =  QLineEdit()
    costLine = QLineEdit()
    layout.addWidget(productLabel,1,1)
    layout.addWidget(prodLine,1,2)
    layout.addWidget(costLabel,2,1)
    layout.addWidget(costLine,2,2)

    def add():
        p =prodLine.text()
        c = costLine.text()
        dic[p] = float(c)
        print("item Added")

    def delete():
        if dic == {}:
            print("No record to delete")
        else:
            dic.popitem()
            print("record deleted")

    button = QPushButton("Add record")
    button.clicked.connect(add)
```
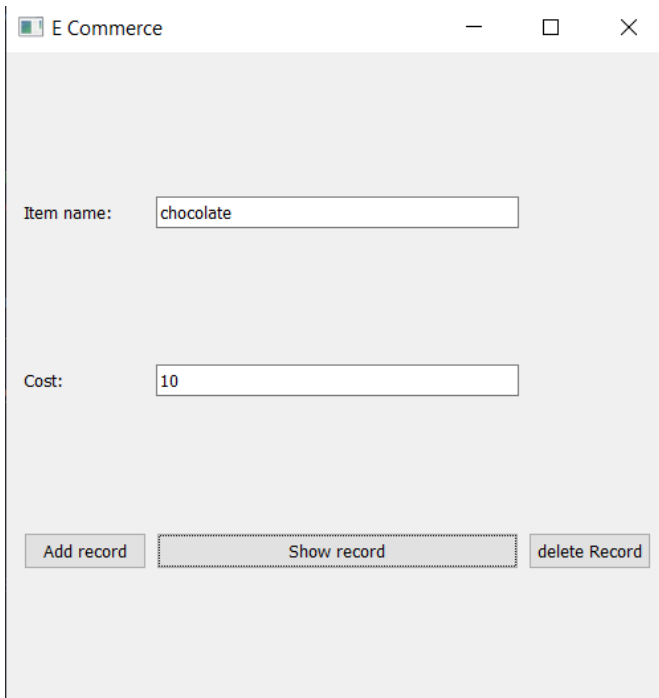
```
        layout.addWidget(button,3,1)
        button1 = QPushButton("Show record")
        button1.clicked.connect(lambda:print(dic))
        layout.addWidget(button1,3,2)
        button2 = QPushButton("delete Record")
        button2.clicked.connect(delete)
        layout.addWidget(button2,3,3)
        w.setLayout(layout)
        w.setWindowTitle("E Commerce")
        w.show()
        sys.exit(app.exec_())
if __name__ == "__main__":
    main()
```

Output:

Conclusion: From this experiment, it is concluded that we have understood the concept of File handling, GUI and database in Python