```
#!/bin/bash
function insert_new_record () {
    echo -n "Enter key: "
    read key
    info=$(grep -w "$key" $1)
    key2=`echo $info cut -d ":" -f 1`
    if [ $key == $key2 ]
    then
        echo "Already exist"
    else
        echo -n "Enter value: "
        read value
        coded=`echo $value base64`
        echo "version 1 $USER" >> $1
        echo "$key: $coded" >> $1
        echo
        echo
        echo "Adding new key to the database ($1)..... Done"
        echo
        echo " "
    fi
function delete record () {
    echo -n "Enter key: "
    read key
    info=$(grep -n "$key" $1)
    key2=`echo $info cut -d ":" -f 2`
    line=`echo $info cut -d ":" -f 1`
    line2=$(expr $line - 1)
```

```
if [ $key == $key2 ]
    then
        sed -i.bak -e "$line d;$line2 d" $1
        echo "
        echo " "
        echo "The record holding the key $key got deleted."
        echo " "
    else
        echo "
       echo " "
        echo "Does not exist"
        echo "
        echo " "
   fi
}
# grep -n
# grep -B 1
function search_record () {
    echo -n "Enter key: "
    read key
   value=$(grep -w "$key" $1)
    key2=`echo $value cut -d ":" -f 1`
    if [ $key == $key2 ]
    then
        decoded=`echo $value cut -d ':' -f2-`
        echo "
       echo " "
        echo "$key: $(echo $decoded base64 -d)"
        echo "
        echo " "
    else
        echo "
       echo " "
        echo "Does not exist"
        echo "
        echo " "
    fi
```

```
function edit_record () {
    echo -n "Enter key: "
    read key
    info=$(grep -n "$key" $1)
    key2=`echo $info cut -d ":" -f 2`
    line=`echo $info cut -d ":" -f 1`
    line2=$(expr $line - 1)
   fullInfo=$(grep -B 1 "$key" $1)
    number=`echo $fullInfo cut -d " " -f 2`
    newNumber=$(expr $number + 1)
    if [ $key == $key2 ]
    then
        coded=`echo $info cut -d ':' -f3-`
        echo "old value: $(echo $coded base64 -d)"
        echo -n "Enter new value: "
        read newValue
        newCoded=`echo $newValue base64`
        sed -i "$line2 s/$number/$newNumber/" $1
        sed -i "$line s/$coded/$newCoded/" $1
        echo "
        echo " "
        echo "Successful"
        echo " "
        echo " "
    else
        echo "
        echo " "
```

```
echo "Does not exist"
echo "____"
echo " "

fi
}
```