Sample Run Project 5

```
Programmer:         Mohamed Kaid
Course:             COSC 311,  W '22
Project:            5
Due date:           4-19-22
Welcome!!
1- Create a random-access file
2- Display a random-access file
3- Build the index
4- Display the index
5- Retrieve a record
6- Modify a record
7- Add a new record
8- Delete a record
9- Exit
Choice:
```

Figure 1 Display Menu

```
Choice: 1
Creating new Random File
Enter an Input File: students.txt
Enter an output file: data
Data sent to File
```

Figure 2 Creating random File

```
Choice: 2
Enter Random Access File Name: data
Display Records
Tom                     Wiely                   1234        3.76
Mike                    Johnson                 1111        2.78
Alex                    Shafer                  3333        4.0
Nancy                   Koffman                 4444        3.56
Karen                   Thomson                 2222        3.2

What would you like to do next:
M: to return to main menu
N: for next screen
A: to display all
Choice: a
Sara                    Dorthy                  9999        1.79
Adam                    Nelson                  7777        2.7
Kate                    Peterson                6666        3.5
Carla                   Howard                  3325        3.9
Ben                     Jones                   5555        2.42
Dan                     Fuhr                    1156        3.97
File done
```

Figure 3 Display Random File

```
Choice: 3
Enter a database name: data

DONE
```

Figure 4 Building Data Base

Sample Run Project 5

```
Choice: 4
Select the start and the end for printing the table(0-36):
Start:
End:
7:
(1234,0)
(3333,2)
9:
(4444,3)
10:
(1156,10)
11:
(2222,4)
12:
(7777,6)
16:
(5555,9)
21:
(1111,1)
29:
(3325,8)
30:
(9999,5)
(6666,7)
```

Figure 5 Displaying Data Base

```
Choice: 5
Enter student ID: 3333
Alex                 Shafer               3333     4.0
```

Figure 6 Getting a record

```
Choice: 6
Enter student ID: 3333
Alex                  Shafer                3333      4.0
1- Change the first name:
2- Change the last name:
3- Change GPA:
4- Done:
Choice: 1
Enter Student First Name:
mohamed
1- Change the first name:
2- Change the last name:
3- Change GPA:
4- Done:
Choice: 2
Enter Student Last Name:
kaid
1- Change the first name:
2- Change the last name:
3- Change GPA:
4- Done:
Choice: 4
File Modified
```

Figure 7 Modifying the record

```
Choice: 7
Adding a new Record
Enter New Student's First Name: Mohamed
Enter New Student's Last Name: Kaid
Enter Student ID: 3343
Enter Student GPA: 3.4
Student has been added
```

Figure 8 Adding a Record

Sample Run Project 5

```
Choice: 8
Enter student ID: 1234
Tom                    Wiely                    1234        3.76
Record Deleted
```

Figure 9 Deleting a Record

```
Choice: 9
7: (3333,2)
9: (4444,3)
10: (1156,10)
11: (2222,4)
12: (7777,6)
16: (5555,9)
21: (1111,1)
29: (3325,8)
30: (9999,5) (6666,7)
Thank you!! Have a nice day
```

Figure 10 Ending the Program