```
1 from student_text import enter_stds
 2 from student_text import read_stds
 3 from student text import write stds
 4
 5 def print_stds():
       stds=read_stds()
 7
       for std in stds:
 8
           std info = std.split()
           print("First Name:",std_info[0],"Last Name:",std_info[1],"Term:",
 9
   std_info[2], "GPA:", std_info[3], "Student ID: ", std_info[4])
10
11 def search stds():
       std_id = input("Enter Student's ID: ")
12
13
       stds = read_stds()
       for std in stds:
14
15
           std_info = std.split()
16
           if std info[4] == std id:
               return "found", std
17
       return "not found", None
18
19
20 def remove_stds(std_id):
       stds=read stds()
21
22
       for std in stds:
23
           std_info = std.split()
           if std_info[4] == std_id:
24
25
               stds.remove(std)
               write_stds(opt= "w" , empty = 1)
26
27
               for std in stds:
                   write_stds(std)
28
29
       return "removed"
30
31 def update_stds():
       opt_update = input("Enter:\n1-For updating Term \n2-For updating GPA \n")
32
33
       search_result , std = search_stds()
       if opt_update == "1":
34
35
           if search_result == "found":
               term = input("Enter Term: ")
36
37
               std=std.split()
38
               new_std= std.copy()
39
               new_std[2]=term
40
               remove_stds(std[4])
41
               new_std = " ".join(new_std)
42
               write stds(new std)
43
               return new_std
44
           else:
45
               return "not found"
46
       elif opt_update == "2":
47
           if search result == "found":
48
               term = input("Enter GPA: ")
49
50
               new_std= std.copy()
               new_std[3]=term
51
52
               remove_stds(std[4])
               new_std = " ".join(new_std)
53
54
               write_stds(new_std)
55
               return new_std
56
           else:
57
               return "not found"
58
59
```

```
60 def sort_stds():
 61
        opt_sort = input("Enter \n1- From a to z \n2- From z to a")
 62
        stds= read_stds()
 63
 64
        if opt sort == "1":
 65
            sorted_list = sorted(stds , reverse = False)
 66
        elif opt_sort == "2":
 67
 68
            sorted_list = sorted(stds , reverse = True)
 69
 70
        return sorted_list
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82 while True:
        opt=input("1-enter new std 2-print all 3-search 4-remove 5-update 6-sort or done
 83
    to exit:").lower()
 84
        if opt=="done":
 85
            break
        elif opt=="1":
 86
 87
            while True:
 88
                std_info = enter_stds()
 89
                if std_info == "done":
                     print("Done !")
 90
 91
                     break
                elif std_info != "Error":
 92
 93
                    write_stds(std_info)
 94
                     print("Student added succesfully.\n\n\n")
 95
                else:
 96
                     print("Data inserted is invalid !")
 97
        elif opt=="2":
 98
 99
            print_stds()
100
101
102
        elif opt=="3":
            result , std = search stds()
103
            if result == "not found":
104
                print("Student not found !")
105
            else:
106
                print("Student found Sucessfullly\n\n\n")
107
108
                std_info= std.split()
                print("First Name:",std_info[0],"Last Name:",std_info[1],"Term:",
109
    std_info[2], "GPA:", std_info[3], "Student ID: ", std_info[4])
110
111
        elif opt=="4":
            result , std = search_stds()
112
            if result == "found":
113
                remove_stds(std.split()[4])
114
                print("Removed Successfully")
115
116
            else:
                print("Student not found !")
117
```

```
118
119
120
       elif opt=="5":
121
            update_result = update_stds()
            if update_result == "not found":
122
                print("Error: Student not found")
123
124
           else:
                print(update_result , "\n\nStudent updated successfully")
125
126
127
128
       elif opt=="6":
129
130
           stds = sort_stds()
131
           for std in stds:
132
                std_info = std.split()
                print("First Name:",std_info[0],"Last Name:",std_info[1],"Term:",
133
   std_info[2], "GPA:", std_info[3], "Student ID: ", std_info[4])
134
135
```