

```
1 using System;
2 using System.Collections.Generic;
3 using System.Linq;
4 using System.Text;
5 using System.Threading.Tasks;
6
7 namespace ConsoleApp
8 {
9     internal class MainClass
10    {
11
12        public static void Main(string[] args)
13        {
14
15            Console.WriteLine("\t\t\t\t\tWelcome to Assignment 3 (ADO.NET) ↗
16                \n");
17            Console.WriteLine("Work by Dnyaneshwar Chaudhary");
18
19            while (true)
20            {
21                Console.WriteLine("Select an option:");
22                Console.WriteLine("1. Add Course");
23                Console.WriteLine("2. Add Student");
24                Console.WriteLine("3. Edit Course");
25                Console.WriteLine("4. Edit Student");
26                Console.WriteLine("5. Search Course");
27                Console.WriteLine("6. Search Student");
28                Console.WriteLine("7. Delete Course");
29                Console.WriteLine("8. Delete Student");
30                Console.WriteLine("9. Show All Courses");
31                Console.WriteLine("10. Show All Students");
32                Console.WriteLine("11. Show Students in a Particular ↗
33                    Course");
34                Console.WriteLine("0. Exit");
35                Console.Write("Enter your choice: ");
36
37                int choice;
38                if (int.TryParse(Console.ReadLine(), out choice))
39                {
40                    switch (choice)
41                    {
42                        case 1: //Add Course
43
44                            Console.WriteLine("Enter the Course Name to ↗
45                                add : ");
46                            string courseName = Console.ReadLine();
47
48                            Console.WriteLine("Enter the Course Start Date ↗
```

```
(YYYY-MM-DD) to Add : ");
47         string date = Console.ReadLine();
48
49         Console.WriteLine("Enter the Course Trainer : ");
50         string trainer = Console.ReadLine();
51
52         CourseDatabase.AddCourse(coursename, date, trainer);
53
54         break;
55
56         case 2: //Add Student
57
58             Console.WriteLine("Enter the Student Name to add : ");
59             string studentname = Console.ReadLine();
60
61             Console.WriteLine("Enter the Student Year of Pass (YYYY) : ");
62             int YearOfPass = Convert.ToInt32(Console.ReadLine());
63
64             Console.WriteLine("Enter the Course ID : ");
65             int courseid = Convert.ToInt32(Console.ReadLine());
66
67             StudentDatabase.AddStudent(studentname, YearOfPass, courseid);
68
69             break;
70
71         case 3: //Edit Course
72
73             Console.WriteLine("Enter the Trainer Name : ");
74             string trainer1 = Console.ReadLine();
75
76             CourseDatabase.EditCourse(trainer1);
77
78             break;
79
80         case 4: //Edit Student
81
82             Console.WriteLine("Enter the Student ID : ");
83             int stu_id = Convert.ToInt32(Console.ReadLine());
84
85             StudentDatabase.EditStudent(stu_id);
```

```
86
87         break;
88
89     case 5: //Search Course
90
91         CourseDatabase.SearchCourse();
92
93         break;
94
95     case 6: //Search Student
96
97         StudentDatabase.SearchStudent();
98
99         break;
100
101     case 7: //Remove Course
102
103         Console.WriteLine("Enter the Course Trainer : ");
104         string trainer_name = Console.ReadLine();
105
106         CourseDatabase.RemoveCourse(trainer_name);
107
108         break;
109
110     case 8: //Remove Student
111
112         Console.WriteLine("Enter the Student Name : ");
113         string stu_name = Console.ReadLine();
114
115         StudentDatabase.RemoveStudent(stu_name);
116
117         break;
118
119     case 9: //Show All Courses
120
121         CourseDatabase.ShowCourses();
122
123         break;
124
125     case 10: //Show All Students
126
127         StudentDatabase.ShowStudents();
128
129         break;
130
131     case 11: //Students in a Particular Course
132
```

```
133         Console.WriteLine("Enter the Course ID : ");
134         int coursid = Convert.ToInt32(Console.ReadLine);
135         ();
136         CourseDatabase.CourseStudents(coursid);
137
138         break;
139
140         case 0: // Exit
141
142             Environment.Exit(0);
143
144             break;
145
146         default:
147
148             Console.WriteLine("Invalid choice. Please try
again.");
149
150             break;
151
152         }
153     }
154     else
155     {
156         Console.WriteLine("Invalid input. Please enter a valid
number.");
157     }
158 }
159 }
160 }
161 }
162
```