

# ADO - Console Application

```
Results:
stud_id      stud_name      dept_id
-----
301          Dinesh Gaikwad  101
302          Ravi Patil      102
303          Sneha Kulkarni  103
304          Priya Sharma    104
305          Karan Thakur    105
306          Meera Desai     101
307          Ankit Sinha     102
308          Simran Kapoor   103
309          Nikhil Joshi    104
310          Neha Pawar      105

Do you want to continue? (yes/no)
6
[dineshgaikwad@Dineshs-MacBook-Air ServerConnection % dotnet run

Enter the operation to be performed:
1. Create Student Table
2. Insert Student Record
3. Display Student Records
4. Create Course Table
5. Insert Course Record
6. Display Course Records
6

Results:
course_id    course_name      dept_id    t_id
-----
401          Data Structures  101        201
402          Operating Systems 101        206
403          Digital Circuits  102        202
404          Microprocessors   102        207
405          Thermodynamics    103        203
406          Fluid Mechanics   103        208
407          Structural Engineering 104        204
408          Surveying         104        209
409          Database Management 105        205
410          Cyber Security    105        210
411          Computer Networks 101        201
412          Java Programming  101        206
413          Analog Electronics 102        202
414          Control Systems   102        207
415          Machine Design    103        203
416          Manufacturing Processes 103        208
417          Concrete Technology 104        204
418          Environmental Engineering 104        209
419          Web Development   105        210
420          AI & ML Basics    105        205
```

```

static void CreateCourse()
{
    string query = @"
        IF NOT EXISTS (SELECT * FROM sysobjects WHERE
name='Course' AND xtype='U')
        CREATE TABLE Course (
            course_id INT PRIMARY KEY,
            course_name NVARCHAR(100),
            dept_id INT,
            t_id INT
        );";

    ExecuteNonQuery(query, "Course Table created (if not
exists).");
}

static void InsertCourse()
{
    Console.WriteLine("Enter Course ID: ");
    int cid = Convert.ToInt32(Console.ReadLine());

    Console.WriteLine("Enter Course Name: ");
    string cname = Console.ReadLine();

    Console.WriteLine("Enter Department ID: ");
    int deptId = Convert.ToInt32(Console.ReadLine());

    Console.WriteLine("Enter Teacher ID: ");
    int tid = Convert.ToInt32(Console.ReadLine());

    string query = "INSERT INTO Course VALUES (@cid, @cname,
@deptId, @tid)";

    using (SqlConnection con = new
SqlConnection(connectionString))
    {
        con.Open();
        using (SqlCommand cmd = new SqlCommand(query, con))
        {
            cmd.Parameters.AddWithValue("@cid", cid);
            cmd.Parameters.AddWithValue("@cname", cname);
            cmd.Parameters.AddWithValue("@deptId", deptId);
            cmd.Parameters.AddWithValue("@tid", tid);
            cmd.ExecuteNonQuery();
            Console.WriteLine("Course inserted
successfully.");
        }
    }
}

```

```

static void DisplayCourse()
{
    string query = "SELECT * FROM Course";
    using (SqlConnection con = new
SqlConnection(connectionString))
    {
        con.Open();
        using (SqlCommand cmd = new SqlCommand(query, con))
        using (SqlDataReader reader = cmd.ExecuteReader())
        {
            Console.WriteLine("\nCourse Records:");

Console.WriteLine("course_id\tcourse_name\tdept_id\tt_id");

Console.WriteLine("-----
-");

            while (reader.Read())
            {
                Console.WriteLine($"{reader["course_id"]}
\t{reader["course_name"]}\t{reader["dept_id"]}
\t{reader["t_id"]}");
            }
        }
    }
}

```