***Task B***

This C# application is designed as a Windows Forms Application that manages a dictionary of students, allowing the user to add, remove, display, and update students' enrollment statuses. Each student has a unique ID, name, and enrollment status. The application consists of two files: Form1.cs, which handles the user interface and actions, and Student.cs, which defines the Student class.

The Student class has three properties: ID, Name, and EnrollmentStatus. The ID and Name are integers and strings, respectively, and the EnrollmentStatus is a boolean value representing whether the student is enrolled (true) or not (false).

Form1.cs contains the main form and event handlers for user interactions. The form consists of several text boxes, radio buttons, and buttons that the user can use to interact with the application.

A dictionary called studentDictionary is used to store the students, with the student's ID as the key and the student object as the value.

The addStudentBtn\_Click event handler is responsible for adding new students to the dictionary. When the user clicks the "Add Student" button, the entered ID and name are validated, a new Student object is created, and the student is added to the dictionary. The display is then refreshed to show the updated list of students.

The DisplayStudents method is responsible for displaying the current list of students in the studentList ListBox control. It first clears the list, then iterates through the studentDictionary values and adds each student's information as a formatted string.

The searchBtn\_Click event handler searches for a student based on the entered ID. If a student with that ID is found, their information is displayed in the studentList ListBox control. If not, an error message is shown.

The RemoveBtn\_Click event handler removes a student from the dictionary based on the entered ID. If a student with that ID is found, they are removed from the dictionary and the display is refreshed to show the updated list of students.

The updateBtn\_Click event handler updates the enrollment status of a student based on the entered ID and the selected radio button (enrolled or unenrolled). If a student with that ID is found, their enrollment status is updated in the dictionary, and the display is refreshed to show the updated student information.

Throughout the event handlers, proper input validation is performed, such as checking for valid numeric IDs and non-empty names. When needed, error messages are displayed to guide the user.

This application demonstrates the use of dictionaries and basic user interface elements in a Windows Forms Application, as well as input validation and event handling for a responsive user experience.