**1. AttendanceReportForm:**

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| Purpose | SQL Statement |
| To populate SectionNameComboBox | SELECT SectionName FROM Sections |
| To populate AttendanceReportDataGridView | SELECT S.StudentId, S.StudentLastName, S.StudentFirstName, A.Present FROM (Students S INNER JOIN Attendance A ON A.StudentId = S.StudentId) INNER JOIN Sections Sec ON Sec.SectionId = A.SectionId WHERE (A.ClassDate LIKE '" & AttendanceReportDateTimePicker.Value.Date & "' AND A.SectionId = (Select SectionId FROM Sections WHERE SectionName = '" & SectionNameComboBox.Text & "')) |
| To calculate TotalPresentCount | SELECT COUNT(A.Present) AS TotalPresentCount FROM (Students S INNER JOIN Attendance A ON A.StudentId = S.StudentId) INNER JOIN Sections Sec ON Sec.SectionId = A.SectionId WHERE (A.ClassDate LIKE '" & AttendanceReportDateTimePicker.Value.Date & "' AND A.Present = True AND A.SectionId = (Select SectionId FROM Sections WHERE SectionName = '" & SectionNameComboBox.Text & "')) |
| To display AttendanceReportChartElementHost - dataPoint.YValue & dataPoint.XValue | SELECT TABLE1.A.ClassDate, TABLE1.Present, TABLE2.Total, (TABLE1.Present/TABLE2.Total \* 100) AS AttendancePercentage FROM ((SELECT A.ClassDate, COUNT(A.Present) AS Present FROM (Students S INNER JOIN Attendance A ON A.StudentId = S.StudentId) INNER JOIN Sections Sec ON Sec.SectionId = A.SectionId WHERE((A.ClassDate BETWEEN #" & FromDateTimePicker.Value.Date & "# AND #" & ToDateTimePicker.Value.Date & "#) AND A.Present = True AND A.SectionId = (Select SectionId FROM Sections WHERE SectionName = '" & SectionNameComboBox.Text & "')) GROUP BY A.ClassDate) AS TABLE1 INNER JOIN (SELECT A.ClassDate, COUNT(S.StudentId) AS Total FROM (Students S INNER JOIN Attendance A ON A.StudentId = S.StudentId) INNER JOIN Sections Sec ON Sec.SectionId = A.SectionId WHERE ((A.ClassDate BETWEEN #" & FromDateTimePicker.Value.Date & "# AND #" & ToDateTimePicker.Value.Date & "#) AND A.SectionId = (Select SectionId FROM Sections WHERE SectionName = '" & SectionNameComboBox.Text & "')) GROUP BY A.ClassDate) AS TABLE2 ON TABLE1.A.ClassDate = TABLE2.A.ClassDate) |

**2. CourseEnrollmentForm:**

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| Purpose | SQL Statement |
| To populate StudentIdComboBox | SELECT \* FROM Students |
| To populate StudentFullNameTextBox | SELECT \* FROM Students WHERE StudentId = " & StudentIdComboBox.Text & " |
| To populate SelectedCourseListDataGridView | SELECT OC.CourseName, Sec.SectionName, S.ScheduleName, I.InstructorLastName & ', ' & I.InstructorFirstName AS InstructorName, OC.CourseFee FROM (((((Sections Sec INNER JOIN Schedule S ON S.ScheduleId = Sec.ScheduleId) INNER JOIN Instructors I ON I.InstructorId = Sec.InstructorId) INNER JOIN OfferedCourses OC ON OC.CourseId = Sec.CourseId) INNER JOIN CourseEnrollment CE ON CE.SectionId = Sec.SectionId) INNER JOIN Students Stu ON Stu.StudentId = CE.StudentId) WHERE Stu.StudentId = " & StudentIdComboBox.Text & " |
| To populate CourseNameComboBox | SELECT CourseName FROM OfferedCourses |
| To populate GiftNameTextBox | SELECT GiftName FROM OfferedCourses WHERE CourseName = '" & CourseNameComboBox.Text & "' |
| To populate CoursesListDataGridView | SELECT Sec.SectionName, S.ScheduleName, I.InstructorLastName & ', ' & I.InstructorFirstName AS InstructorName, OC.CourseFee FROM (((Sections Sec INNER JOIN Schedule S ON S.ScheduleId = Sec.ScheduleId)INNER JOIN Instructors I ON I.InstructorId = Sec.InstructorId) INNER JOIN OfferedCourses OC ON OC.CourseId = Sec.CourseId) WHERE OC.CourseName = '" & CourseNameComboBox.Text & "' |
| To drop/modify courses | DELETE \* FROM CourseEnrollment WHERE StudentId = " & StudentIdComboBox.Text & " |
| To select SectionId | SELECT SectionId FROM Sections WHERE SectionName = '" & SelectedCourseListDataGridView.Rows(i).Cells(2).Value & "' |
| To save the selected courses into CourseEnrollment table | INSERT INTO CourseEnrollment(StudentId,SectionId,CourseEnrollmentDate,RegisteredBy) values(@StudentId,@SectionId,@CourseEnrollmentDate,@EmployeeId) |
| To fetch StudentEmailAddress | SELECT StudentEmail FROM Students WHERE StudentId = " & StudentIdComboBox.Text & " |

**3. LoginForm:**

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| Purpose | SQL Statement |
| To Login into the system Username and Password fields should match with the database values | SELECT \* FROM Employees WHERE EmployeeId = " & EmpId & " AND EmployeePassword = '" & EmpPwd & "' |
| To populate StudentsDataGridView | SELECT \* FROM Students |
| To search a student either by their FirstName or LastName | SELECT \* FROM Students WHERE StudentLastName LIKE '%" & StudentFirstOrLastName & "%' " & " OR StudentFirstName LIKE '%" & StudentFirstOrLastName & "%' |

**4. PlacementsForm:**

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| --- | --- |
| Purpose | SQL Statement |
| To populate StudentIdComboBox | SELECT \* FROM Students |
| To populate CompanyNameComboBox | SELECT \* FROM Companies |
| To populate StudentFullNameTextBox | SELECT \* FROM Students WHERE StudentId = " & StudentIdComboBox.Text & " |
| To fetch CompanyId | SELECT CompanyId FROM Companies WHERE CompanyName = '" & CompanyNameComboBox.Text & "' |
| To insert placement details into the Placements table | INSERT INTO Placements(StudentId,CompanyId,JoiningDate,InterviewDate,Designation,GrossSalary,OtherBenefits) values(@StudentId,@CompanyId,@JoiningDate,@InterviewDate,@Designation,@GrossSalary,@OtherBenefits) |

**5. PlacementsReportForm:**

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| --- | --- |
| Purpose | SQL Statement |
| To display ReportViewer1 (Placements VS Companies Report) | SELECT COUNT(S.StudentId) AS StudentsPlaced, C.CompanyName FROM ((Students S INNER JOIN Placements P ON P.StudentId = S.StudentId) INNER JOIN Companies C ON C.CompanyId = P.CompanyId) GROUP BY C.CompanyName |
| To display the Placement meter (Placement Percentage) | SELECT (Count1/Count2)\*100 AS PlacementPercentage FROM ((SELECT COUNT(\*) AS Count1 FROM (SELECT DISTINCT(StudentId) FROM Placements)) AS TABLE1),((SELECT COUNT(\*) AS Count2 FROM Students) AS TABLE2) |

**6. RecordAttendanceForm:**

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| Purpose | SQL Statement |
| To populate CourseNameComboBox | SELECT CourseName FROM OfferedCourses |
| To populate CourseIdTextBox | SELECT CourseId FROM OfferedCourses WHERE CourseName = '" & CourseNameComboBox.Text & "' |
| To populate SectionNameComboBox | SELECT SectionName FROM Sections WHERE CourseId = " & CourseIdTextBox.Text & " |
| To populate SectionIdTextBox | SELECT SectionId FROM Sections WHERE SectionName = '" & SectionNameComboBox.Text & "' |
| To populate RecordAttendanceDataGridView | SELECT S.StudentId, S.StudentLastName, S.StudentFirstName FROM (Students S INNER JOIN CourseEnrollment CE ON CE.StudentId = S.StudentId) INNER JOIN Sections Sec ON Sec.SectionId = CE.SectionId WHERE CE.SectionId = " & SectionIdTextBox.Text & " ORDER BY S.StudentId ASC |
| To record attendance into Attendance table | When PresentColumnValue = False:  INSERT INTO Attendance(StudentId,SectionId,ClassDate) values(@StudentId,@SectionId,@AttendanceDate)  When PresentColumnValue = True:  INSERT INTO Attendance(StudentId,SectionId,ClassDate,Present) values(@StudentId,@SectionId,@AttendanceDate,@Present) |

**7. StudentRegistrationForm:**

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| Purpose | SQL Statement |
| Populate StudentIdTextBox with Running Number | SELECT \* FROM Students  SELECT MAX(StudentId) AS MaxStuIdFromDB FROM Students |
| To insert student details into Students table | INSERT INTO Students(StudentId,StudentLastName,StudentFirstName,StudentDob,StudentGender,MaritalStatus,AddressLine,City,State,PostalCode,StudentPhone,StudentEmail,RegisteredBy,RegistrationDt) values(@StudentId,@StudentLastName,@StudentFirstName,@StudentDob,@StudentGender,@MaritalStatus,@AddressLine,@City,@State,@PostalCode,@StudentPhone,@StudentEmail,@RegisteredBy,@RegistrationDate) |
| To update student details in Students Table | UPDATE Students SET StudentLastName=@StudentLastName,StudentFirstName=@StudentFirstName,StudentDob=@StudentDob,StudentGender=@StudentGender,MaritalStatus=@MaritalStatus,AddressLine=@AddressLine,City=@City,State=@State,PostalCode=@PostalCode,StudentPhone=@StudentPhone,StudentEmail=@StudentEmail,RegisteredBy=@RegisteredBy,RegistrationDt=@RegistrationDate WHERE StudentId=" & Integer.Parse(StudentIdTextBox.Text) & " |

**8. StudentsListByCoursesForm:**

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| --- | --- |
| Purpose | SQL Statement |
| To populate CourseNameComboBox | SELECT CourseName FROM OfferedCourses |
| To populate StudentsDataGridView | SELECT S.\* FROM (((Students S INNER JOIN CourseEnrollment CE ON CE.StudentId = S.StudentId) INNER JOIN Sections Sec ON Sec.SectionId = CE.SectionId) INNER JOIN OfferedCourses OC ON OC.CourseId = Sec.CourseId) WHERE OC.CourseName = '" & CourseNameComboBox.Text & "' ORDER BY S.StudentId ASC |