

## PROG8080 Database Management Assignment 7

Use the SIS database for this assignment. Due August 13 11:59pm

#	Grouping and Aggregation queries	Table(s)	Marks																												
0.	SET ANSI_WARNINGS OFF;		0																												
1.	Show the count of the employees in the <b>Employee</b> table who work in the School of Business, aliased as 'Employees in the School of Business'	Employee	2																												
2.	List the students, and their final marks, who took PROG8080 during the Fall 2009 semester and achieved a higher than average mark in the course. List each student's student number and mark, along with their first and last name, in ascending order of last name.	CourseStudent Person CourseOffering	6																												
3.	<p>Show <b>CourseOffering</b> <i>courseNumber</i>, <b>CourseStudent</b> minimum <i>finalMark</i> aliased as 'Lowest Mark', <b>CourseStudent</b> average <i>finalMark</i> aliased as 'Average Mark' and <b>CourseStudent</b> maximum <i>finalMark</i> aliased as 'Maximum Mark' for the Fall 2010 session grouped by <i>courseNumber</i>. Report all grades as whole numbers.</p> <table> <thead> <tr> <th>Course</th><th>Minimum Mark</th><th>Average Mark</th><th>Maximum Mark</th></tr> </thead> <tbody> <tr> <td>CDEV1020</td><td>90</td><td>95</td><td>99</td></tr> <tr> <td>INF01030</td><td>56</td><td>68</td><td>79</td></tr> <tr> <td>INF01570</td><td>80</td><td>90</td><td>99</td></tr> <tr> <td>INF08000</td><td>61</td><td>72</td><td>89</td></tr> <tr> <td>PROG8080</td><td>70</td><td>81</td><td>94</td></tr> <tr> <td>PROG8090</td><td>56</td><td>76</td><td>98</td></tr> </tbody> </table> <p>(6 row(s) affected)</p>	Course	Minimum Mark	Average Mark	Maximum Mark	CDEV1020	90	95	99	INF01030	56	68	79	INF01570	80	90	99	INF08000	61	72	89	PROG8080	70	81	94	PROG8090	56	76	98	CourseOffering CourseStudent	5
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4.	List the students (student number, first and last name) who have thus far paid less in total for their education than the average amount paid by all students.	Audit, Person	7																												
5a.	<p>List the number of courses taught by employees in the School of Engineering and IT, for those courses offered in any semester of 2008 or 2009. Include in the result the employee number, first name, and last name, along with the count of the number of courses that they taught, aliased with "Courses Taught". Order the result by employee last name. Use only inner joins.</p> <table> <thead> <tr> <th>employeeNumber</th><th>firstName</th><th>lastName</th><th>Courses Taught</th></tr> </thead> <tbody> <tr> <td>7572373</td><td>KATHY</td><td>HUHN</td><td>3</td></tr> <tr> <td>3455730</td><td>DALE</td><td>KARSH,</td><td>2</td></tr> <tr> <td>3566163</td><td>ABDOLSAMAD</td><td>KATHIRESAN</td><td>2</td></tr> <tr> <td>3514239</td><td>RAKESH</td><td>WEKENMANN</td><td>3</td></tr> <tr> <td>8135170</td><td>RICK</td><td>WHETSTONE</td><td>3</td></tr> <tr> <td>2117745</td><td>LYNDOL</td><td>YUROVIC</td><td>3</td></tr> </tbody> </table>	employeeNumber	firstName	lastName	Courses Taught	7572373	KATHY	HUHN	3	3455730	DALE	KARSH,	2	3566163	ABDOLSAMAD	KATHIRESAN	2	3514239	RAKESH	WEKENMANN	3	8135170	RICK	WHETSTONE	3	2117745	LYNDOL	YUROVIC	3	Person, School, Employee, CourseOffering	9
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5b.	<p>Modify the query used in Question (5a) and include all faculty in the School of Engineering and IT, even if they did not teach any courses in the years 2008 or 2009.</p> <table><thead><tr><th>number</th><th>firstName</th><th>lastName</th><th>Courses Taught</th></tr></thead><tbody><tr><td>7572373</td><td>KATHY</td><td>HUHN</td><td>3</td></tr><tr><td>3455730</td><td>DALE</td><td>KARSH,</td><td>2</td></tr><tr><td>3566163</td><td>ABDOLSAMAD</td><td>KATHIRESAN</td><td>2</td></tr><tr><td>3214350</td><td>PAULETTE</td><td>SIMS</td><td>0</td></tr><tr><td>3514239</td><td>RAKESH</td><td>WEKENMANN</td><td>3</td></tr><tr><td>8135170</td><td>RICK</td><td>WHETSTONE</td><td>3</td></tr><tr><td>2117745</td><td>LYNDOL</td><td>YUROVIC</td><td>3</td></tr><tr><td>4427732</td><td>ANGEL</td><td>ZABLAN</td><td>0</td></tr></tbody></table>	number	firstName	lastName	Courses Taught	7572373	KATHY	HUHN	3	3455730	DALE	KARSH,	2	3566163	ABDOLSAMAD	KATHIRESAN	2	3214350	PAULETTE	SIMS	0	3514239	RAKESH	WEKENMANN	3	8135170	RICK	WHETSTONE	3	2117745	LYNDOL	YUROVIC	3	4427732	ANGEL	ZABLAN	0	Person, School, Employee, CourseOffering	6
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6.	<p>Produce a list of all of the co-op programs in the SIS database and the total tuition for those programs over all semesters. As these amounts are for co-op programs, the base tuition amount must be increased by the corresponding co-op multiplier for each specific program. Output the program acronym and program name in the result, along with the total tuition. Hint: the Computer Programmer (CP) program is not a co-op program. Order the results by program acronym, and format the total tuition amounts using dollars and cents.</p> <table><thead><tr><th>Acronym</th><th>name</th><th>Total Fees</th></tr></thead><tbody><tr><td>CAD</td><td>Computer Applications Development (Coop)</td><td>\$ 6,760.00</td></tr><tr><td>CPA</td><td>Computer Programmer/Analyst (Coop)</td><td>\$ 9,632.00</td></tr><tr><td>ITID</td><td>IT Innovation and Design (Coop)</td><td>\$ 9,642.56</td></tr><tr><td>ITSS</td><td>Information Technology Support Services (Coop)</td><td>\$ 7,248.00</td></tr></tbody></table>	Acronym	name	Total Fees	CAD	Computer Applications Development (Coop)	\$ 6,760.00	CPA	Computer Programmer/Analyst (Coop)	\$ 9,632.00	ITID	IT Innovation and Design (Coop)	\$ 9,642.56	ITSS	Information Technology Support Services (Coop)	\$ 7,248.00	Program ProgramFee	5																					
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7.	<p>List the students and the total amount paid for those students who have paid total fees of at least triple the average payment amount. Include the students' first and last names in the result. Order the result of first name within last name. Alias the total amount paid as [Fee Payment Total]. Format the monetary amount using dollars and cents notation.</p> <table><thead><tr><th>studentNumber</th><th>firstName</th><th>lastName</th><th>Fee payment total</th></tr></thead><tbody><tr><td>2642726</td><td>SANDRA</td><td>BICKERS</td><td>\$ 13,159.00</td></tr><tr><td>3868247</td><td>MELINDA</td><td>KALINOWSKI</td><td>\$ 13,159.00</td></tr><tr><td>7826662</td><td>GARY</td><td>MCLAUGHLIN</td><td>\$ 6,791.44</td></tr><tr><td>1335314</td><td>JOSEPH</td><td>NOLAN</td><td>\$ 10,000.00</td></tr></tbody></table>	studentNumber	firstName	lastName	Fee payment total	2642726	SANDRA	BICKERS	\$ 13,159.00	3868247	MELINDA	KALINOWSKI	\$ 13,159.00	7826662	GARY	MCLAUGHLIN	\$ 6,791.44	1335314	JOSEPH	NOLAN	\$ 10,000.00	Person Payment	5																
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