COMPUTER Applications OLYMPIAD

Final Round 2010

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Scenario

Lake View College is a new high school that so far has only grades 10 and 11 learners and a brand new campus on the banks of the Howick Lake close to some spectacular mountains. At the end of the 1st term the college had a disaster when their network server crashed. The disaster worsened when it was discovered that the backup was corrupt and the data could not be used. The CAT teacher, who is a relative of yours, has asked whether you could reproduce all the information they require from the one spreadsheet file that he had saved on his PC.

So here's your chance!

You have been provided with a spreadsheet file containing all the data that the college has on each learner. The same data has also been made available in a single database table. You have FOUR (4) hours to complete as many of the tasks outlined below as possible. You may use any of the standard Office applications to produce the required output, unless an application is specified.

NB: Some tasks are easy but may take a long time to complete while others may be more difficult but could be done in a shorter time. You must, therefore, manage your time carefully.

Your final report must be in the form of a PowerPoint presentation which will show what you have produced and the background to your choices for each task. Evidence of the outputs of the different tasks will also be required.

The details of each of the tasks are outlined on the next two pages. **READ THE DETAILS OF EACH TASK CAREFULLY BEFORE COMMENCING THE TASK.**

Tasks:

You are required to produce the following documents:

1. A college letterhead
2. A set of address labels
3. A nominal roll for the college
4. A class list for a specific teacher
5. A list of subject averages
6. A list of sports groups per age group per house
7. A birthday list
8. A table of numbers of learners per class
9. A table of numbers of learners per subject
10. A symbol (rating/level/code) distribution
11. A report per learner

The Tasks

The tasks have a rating of easy, medium or challenging. These ratings will be used in the judging of the number and quality of the tasks you complete.

The data files containing the learner data that you will need to complete the tasks are labelled **LVC.xlsx** and **LVC.accdb**

Task	Detail	Rating
Letterhead	Create a letterhead for the college. This letterhead must contain the college logo as well as other basic information about the college that one would normally expect to find on a formal letterhead. The basic college information is presented in a document called '**Basic Info**' while the college logo and photos of some of the views around the college can be found in the folder called '**Some Photos**'	Easy
Labels	Create a set of address labels, one label for each learner. The labels are on an A4 sheet and are 3 across and 8 down. There is no gap between any of the labels or between a label and the edge of the page. The labels must contain only the parent salutation and the address. You may use the Tower W110 Mailing Label definition.	Easy
Nominal roll	Create a document with an alphabetical listing of all learners. The list should contain each learner's surname, first name and class. The complete list of all learners must appear on a single page.	Easy
Mr Smith's classes	Create a mark list for each of Mr Smith's two Mathematics classes. The mark list must contain the learner's name and initial, grade, class and gender. A block must be provided next to each name for a mark to be entered for data capture purposes.	Easy
Average list	Create a list of subject averages for each subject in each grade.	Easy
Subject numbers	Create a document which shows the number of learners who take each subject in each class in grade 10. The subject names should appear in alphabetical order on the left and the register classes in alphabetical order across the top. The output should be similar to that given below. 	Medium

The table shown in the Subject numbers task:

Subject	10-Cp	10-Fe	10-Jd	10-Je	10-Np	10-Sr	10-Tm	Total
Accounting	2	7	7	4	3	14	8	45
Afrikaans First Additional Language	29	31	26	27	19	23	29	184
Afrikaans Home Language					7	8		15
Business Studies	16	4	13	17	10	14	11	85
Computer Applications Technology (CAT)	11	1	5	13	4	7	4	45
Consumer Studies	16	12	6	19	10	9	6	78
English Home Language	29	31	27	27	26	31	29	200
Geography	6	2	6	6	4	6	10	40

Task	Detail	Rating
Sports group	Create a spreadsheet file that contains all learners grouped and sorted by house, gender, age group and name. The learner's date of birth, grade and class must also be included in the data. Filter the data so that only the U17 females in 'Fermat' house are displayed. **Note:** The age group is determined from the learner's age on the 1ˢᵗ January 2011. If a learner is 15 on 1 January 2011 then they are in the 'U16' age group, if they are 16 then they are in the 'U17'age group, and so on.	Medium
Birthday list	Create a birthday list which contains the birthdays for all learners. The birthday list must begin on 1st January and end on 31ˢᵗ December. The layout should look similar to the example below. <table><tr><td>Day</td><td>Month</td><td>Full Name</td><td>Class</td></tr><tr><td>2</td><td>January</td><td>Gian Mc Dougall</td><td>11-Mf</td></tr><tr><td>2</td><td>January</td><td>Jessica Southern</td><td>11-Bj</td></tr><tr><td>6</td><td>January</td><td>Ian Daniels</td><td>10-Je</td></tr><tr><td>7</td><td>January</td><td>Brett Doyle</td><td>11-Tg</td></tr><tr><td>9</td><td>January</td><td>Cody Forrester</td><td>10-Cp</td></tr><tr><td>10</td><td>January</td><td>Colyn O'Donoghue</td><td>10-Jd</td></tr><tr><td>13</td><td>January</td><td>Michelle Kyte</td><td>11-Bj</td></tr><tr><td>13</td><td>January</td><td>Nicholas Davids</td><td>10-Jd</td></tr></table>	Medium
Numbers	Create a document which indicates the grade, and then per class in the grade, the number of male and female learners and the total number of learners. The grand totals for males, females and class totals for each grade must also be given.	Medium
Symbol distribution	Create a diagram showing the symbol (code) distribution for all the learners in each of grades 10 and 11 that take English Home Language. The rating scale to be used is as follows: <table><tr><th>Code</th><th>Mark %</th><th>Code</th><th>Mark %</th></tr><tr><td>L7</td><td>80 – 100</td><td>L3</td><td>40 – 49</td></tr><tr><td>L6</td><td>70 – 79</td><td>L2</td><td>30 – 39</td></tr><tr><td>L5</td><td>60 – 69</td><td>L1</td><td>0 – 29</td></tr><tr><td>L4</td><td>50 – 59</td><td></td><td></td></tr></table>	Medium
Create a report for each learner	Create a report for each learner in the college. You must design the complete report. The report must contain the college information (i.e. logo, address, etc.). For each learner the learner's name, class, number of days absent in the term, and for each subject that the learner takes, the subject name, the subject teacher, the mark obtained, a rating from 1 to 7, and the subject average must be provided.	Challenging