Free University of Bolzano Bozen – School of Economics and Management

Information Systems and Data Management exam

# Rules

* + No communication with other people or among students is allowed. Phones and every other means of communication must be turned off. Opening any communication program on the computer is not allowed and is considered cheating.
  + You are responsible for the correct copy of your files.

Enter Windows with your login. You have 40 minutes starting from now.

Copy all the files in **\\ubz01fst\courses\exam\_coletti\YOURNAME** on your Desktop. At the end of each exercise copy here only the files you are required to return.

# Exercise File handling

* From http://www.paolocoletti.it/test download files **marketing.txt** and **test.rtf** and save them on your Desktop;
* open file test.rtf with Microsoft Word and convert it in Word 2007 format, calling it **test.docx**;
* compress only files marketing.txt and test.rtf into file **compressed.zip**;
* delete files marketing.txt and test.rtf;
* return files compressed.zip and test.docx.

# Exercise Excel

Open with Microsoft Excel 2007 file **stocks.xlsx** and in sheet **list**:

* freeze the first two rows;
* fill column N with formula ;
* fill column O with formula (pay attention that signs are negative now);
* fill column R, with header “gain”, with formula in percentage format;
* in column S put for stocks sold in the period January –June a date corresponding to the 30th June of the sell year and for stocks sold in the period July –December a date corresponding to the 30th June of one year after the sell date;
* sort the data in rows 3-156 in buy date order and, in case of same buy date, in name alphabetical order;
* in cell Q2 calculate the sum of “sell money” for stocks with “buy money” larger than 1000;
* in cells N2 calculate the net present value of the “buy money” with “buy date” using a discount rate of 4%;
* print the first 80 rows on a 2-pages landscape PDF file, called **stocks.pdf**, with rows 1-30 on the first page and 31-80 on the second page, with gridlines, with a header with your name on the left and date and time centered;
* in another sheet calculate the descriptive statistics for column F.

Build a new sheet called **Graph** with tab coloured green and inside it:

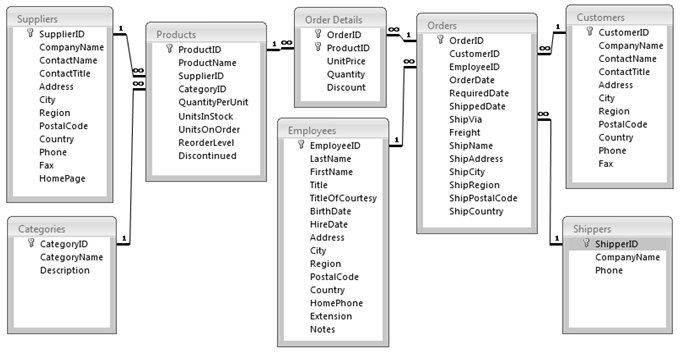
* in columns A put a sequence of numbers from 0 to 20 with steps of 0.1;
* fill column B with the function with taken from column A;
* in a new sheet build a mathematical graph of columns A and B, with thick yellow line and without markers.

In a new sheet consider three loans of 100000 with constant 10% rate: the first loan has yearly payments of 8000, the second 15000 and the third 23000. Determine the durations of the three loans, commenting the results.

Return file **stocks.xlsx**.

## Exercise Access

Open database **northwind.accdb** and



* build a query which displays the list of Suppliers and their orders ID which involve a Seafood products and are handled by Davolio (fields displayed: CompanyName and OrderID);
* build a query which asks for a year and calculates for each supplier the total money generated by its products (ignore the discount) in that year (fields displayed: CompanyName, total paid amount; picture is for year 1995);
* insert a validation rule with appropriate validation text to ensure that employee’s hire date be after employee’s birth date.

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Return file **northwind.accdb**.