Free University of Bolzano Bozen – School of Economics and Management

Computer Science and Information Processing 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.

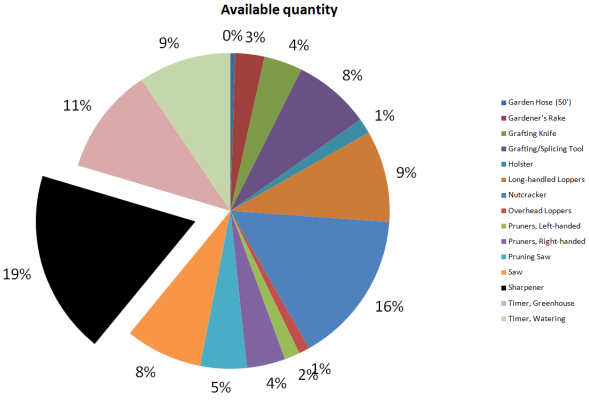
Copy all the files in **\\ubz01fst\courses\exam\_coletti\YOURNAME** on your Desktop. At the end of each exercise copy here only the files you are required to return.

# Exercise File handling

* Uncompress files and directory structure from file **Handling.zip**;
* move the image file to directory **Pictures**;
* open file **word3.txt** and write your name at the beginning;
* duplicate file **ccc.txt** with name **ddd.txt**;
* return all the files and directories.

# Exercise Excel

Open with Microsoft Excel 2007 file **example.xlsx** and save it with name **solution.xlsx**. Then insheet **First**:

* write in cell C21 and D21 the sum of Number1 and Number2 for Italian people;
* using appropriate partial absolute references, fill each row of column F and column G with the corresponding value in column C and D divided by C21 or D21 and put them in percentage format;
* in each row of column H if the average of the corresponding values of columns F and G is larger than 30% write “too much”, otherwise do not write anything;
* apply, with conditional formatting, a yellow highlight to cells containing “Italian” in column B;
* if Number1 is larger than 7 and Number2 smaller than 6 write in the corresponding row of column I the square root of Number1, otherwise the logarithm in base 2 of Number2;
* apply to column I, with conditional formatting, red data bar without displaying numbers.

In sheet **logical**:

* in each row of column G write the minimum between Requested quantity and Available quantity multiplied by Price and added to the appropriate Transport cost according to size;
* print range A1:F16 on a PDF file called **solution.pdf** with gridlines and header with your name on the left and current date on the right;
* in a new sheet build a pie chart for Product Name with Available quantity. Apply data labels outside the pie with percentages, take out the largest slide and paint it black;
* in a new sheet build an histogram for Price.

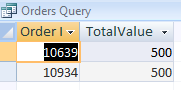
You have 50000 euro to invest for one year. In a new sheet calculate the IRR of these possible investments:

1. putting them into a bank account with net yearly interest rate 1%;
2. putting them into a bank account with 5 € expenses now, 5 € at the end, net 2% (not yearly, it is a net 2% on the starting money) after six months and net 1% (not yearly) after 12 months;
3. lend them to your friend who will pay you 4300 € each month for 12 times.

Return files **solution.xlsx** and **solution.pdf**.

## Exercise Access

Open database **Northwind.accdb** and

* build a query which asks for a number N and writes the list of orders with total value larger than N. Total value is the sum of UnitPrice by Quantity by (1-Discount). Picture is for N=500;
* build a query which displays the list of orders with the number of weeks passed between OrderDate and ShippedDate;
* build a form which displays the list of products with their suppliers. Lock the form to avoid products modifications and suppliers deletions.

Return file **Northwind.accdb**.