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| unibz__FacEconomics_black | Name  ID Nr.  Exam  Exam Code  Exam Date  Signature | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Information Systems and Data Management  27006  13/07/2018  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Exercise Basic computer questions

No questions are allowed: if you have doubts on the theoretical questions fell free to add specifications on this paper and in this case your written answer will be part of the evaluation (positively or negatively). You have 15 minutes starting from now.

For each sentence, check either the TRUE or the FALSE box.

**TRUE  FALSE  You have written your name above on this paper IN A READABLE WAY**

**1 KB is**

TRUE  FALSE  approximately 1000 bits  
TRUE  FALSE  larger than 1 MB  
TRUE  FALSE  larger than 1 TB

TRUE  FALSE  larger than 1 GB

**Open source software**

TRUE  FALSE  is proprietary

TRUE  FALSE  you have the permission to modify it

TRUE  FALSE  you can download it for free but you cannot modify it

**Windows 10**

TRUE  FALSE  appeared on the market in 2012  
TRUE  FALSE  Pro edition is installed at unibz  
TRUE  FALSE  is an operating system

**This is a typical extension for a web page**

TRUE  FALSE  .exe

TRUE  FALSE  .html

TRUE  FALSE  .htm

TRUE  FALSE  .docx

**When you double click on a file which is a program**

TRUE  FALSE  the operating system searches for an appropriate program to open the file  
TRUE  FALSE  the operating system asks you with which file do you want to open it  
TRUE  FALSE  the file runs

**When you are calling via Skype from your computer a friend on another computer**

TRUE  FALSE  your computer is a server   
TRUE  FALSE  your computer is a client  
TRUE  FALSE  your friend’s computer is a server  
TRUE  FALSE  your friend’s computer is a client

**TURN PAGE 🡪**

**This is something that can happen if your passwords get stolen**

TRUE  FALSE  money is transferred out of your bank account   
TRUE  FALSE  your personal documents are deleted  
TRUE  FALSE  your personal documents are modified  
TRUE  FALSE  the email that other people sent to you are read

**This is a suggested practice for your passwords**

TRUE  FALSE  avoid inserting personal information in your passwords   
TRUE  FALSE  change all your passwords every week  
TRUE  FALSE  use strange characters in your password  
TRUE  FALSE  use long passwords

**According to Italian law 196/2003 this technique can be used as a replacement for a password**

TRUE  FALSE  fingerprint recognition

TRUE  FALSE  retina scanning

TRUE  FALSE  USB token

TRUE  FALSE  OTP

**You may get a virus**

TRUE  FALSE  plugging a USB pendrive into your computer  
TRUE  FALSE  while visiting untrustworthy websites  
TRUE  FALSE  opening an email attachment  
TRUE  FALSE  creating a completely new Word document on your computer  
  
**A SPAM message is characterized by being**

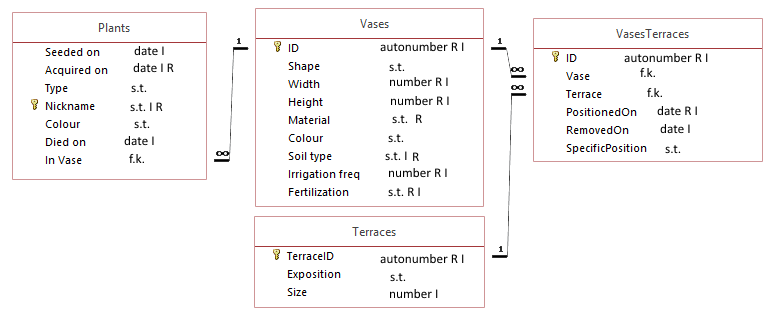
TRUE  FALSE  not wanted by you  
TRUE  FALSE  solicited by you, such as a confirmation email  
TRUE  FALSE  specifically sent to you

**This is a good place to do a backup**

TRUE  FALSE  a second external hard disk  
TRUE  FALSE  a large USB pendrive  
TRUE  FALSE  an automatic online backup system  
TRUE  FALSE  a dedicated directory on your primary hard disk

Exercise Relational databases

**Terraces’ plants**: suppose you are a fanatic and have three terraces full of plants that you keep track of through a temporal database. The database handles each single plant, their position in the vase (in each vase there can be more than one plant and suppose that plants never change vase), the type of soil and irrigation for each vase (which never changes with time) and in which terrace each vase is located (which can change with time). The database must be able to answer the question “How many rose plants did we have last summer on the terrace 3?”.



Irrigation freq is in hours, i.e. 24 for a plant irrigated every day.

Vase’s width is the diameter for circular ones or the smallest between the two sides for rectangular ones.

Specific position is a rough indication whether the vase was on the border of the terrace, close to the entrance, on the corner, etc.

Acquired on is set to Seed on in case a plant was not bought, so it can be R.

Removed On and Died on are not R as they can be Null.

Soil type and Irrigation freq are I as I am planning to do searched based on these parameters. Terrace’s size is I because I want to calculate vases’ density.

Validation:

Died on is Null or Died on is >= Acquired on

Width > 0

Queries

2 tables: list the plants that are currently on terrace 2.

Summary: what is the maximum vase height for vases on terrace 2?