

New facilities in Version 2.7

The main menu screen originally had buttons at the bottom to **Exit** from the program and to turn **Sound** on and off. There are now two extra buttons.

Screen Size allows the user to select the size at which the program is displayed. Version 2.3 automatically selected either 640x480 or 1280x960, choosing the larger if the monitor could display it. Up to five screen sizes are now supported, with the largest available being selected automatically. However, depending on your equipment, some sizes may not give as clear a picture as 640x480 and 1280x960 do. Also, especially when using a projector, you may prefer to have a smaller picture than the maximum. You can immediately see the effect of changing the screen size and select whatever best suits your equipment.

CalcuStat has been included in a re-designed menu in anticipation of Version 3 where it will allow users to carry out any of the calculations described in *Introduction to Statistics* using their own data. Version 2.7 does not include the CalcuStat program but the button brings up a screen shot of part of its data-handling interface.

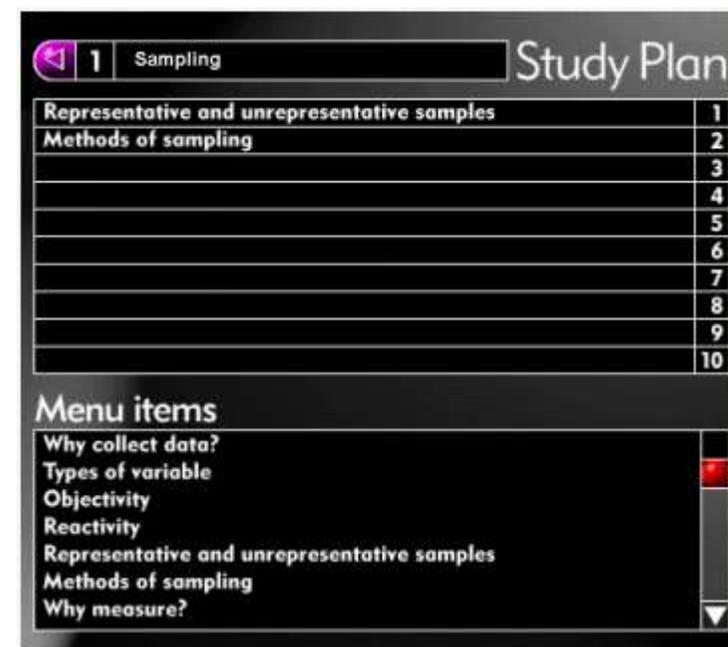
Tutor Guide

Introduction to Statistics

Multi-user Version 2

StatBasics, 11, Salisbury Road, Moseley, Birmingham, B13 8JS

E-mail: support@statbasics.com



Most tutor facilities are provided by *Tutor Tools*. Double-click its screen icon, type your PIN when prompted to do so and we see a screen like this. The buttons on the left give access to the tools.

The list of users begins with the name of the tutor running *Tutor Tools* followed by those of **users registered to that tutor**. To see all of them it may be necessary to scroll down using the slider to the right of the names. The user named Tutor 5 here has been registered but has not yet been converted into a tutor and still appears as a student of Sandy 1.

Sandy1, the tutor, is currently **Selected** (users are selected by clicking on their names) so the name is on a blue background. Below the list of names is information about the most recent login (to *Introduction to Statistics*, not to *Tutor Tools*) of the selected user.

On the right, the upper panel shows the numbers of Right, Missed (not attempted) and Wrong answers by the currently-selected user in each section of **test questions** in *Introduction to Statistics*.

The lower panel allows you to select any of the Question sections in *Introduction to Statistics*. The purpose of doing this is to specify the section to attend to if you click the **Highlight users** button as described below

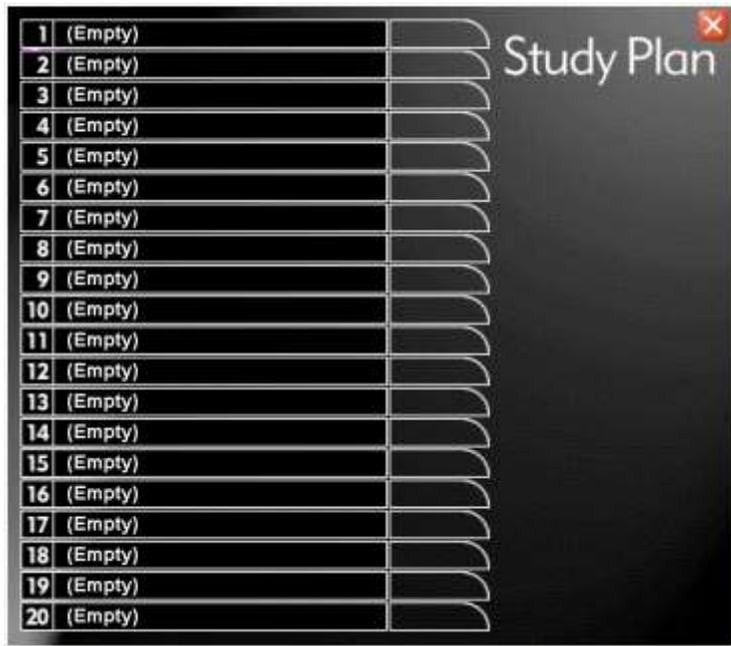
The Exit button allows you to close *Tutor Tools*.

Tutors can save all their current study plans into a file after clicking the **My records** button in *Tutor Tools*. In the same way, they can load a set of study plans from a file that they or a colleague created previously.

Only a complete set of twenty study plans (including any that are 'Empty') can be saved or loaded. It is not possible to save some plans and not others.

Typical uses of study plans:

- Pull together sections dealing with sampling methods, numerical summaries, graphical summaries and significance tests suitable for a particular data set.
- Create a revision scheme of topics that seem to be poorly understood.
- Create a menu made up of several sets of test questions.



Study plans

A study plan is a special menu in *Introduction to Statistics* created by a tutor to present a selection of material in an order different from that of the permanent menus. Study plans are seen by all the students registered to that tutor.

Study plans are created and edited in *Introduction to Statistics* (not *Tutor Tools*). Clicking on the **Study plans** button brings up a panel like the one above. It has space for 20 plans, each of which can have up to 10 sections drawn from any of those in the program in any order.

To create a study plan, click in any of the 20 spaces to bring up the next panel.

Teaching sections are listed in the bottom half of the panel and can be dragged into the slots above. To see all the available sections it will usually be necessary to scroll down through the list. After they have been put in one of the slots, items can still be dragged to a new position.

The study plan is given a name by default (such as Study plan 1) but this name can be edited to anything you like. Here, it has been edited to 'Sampling'. To **delete** a Study Plan, just delete its name and its slot will thereafter be marked '(Empty)'.

Clicking on the purple arrow in the top left corner of the panel takes you to the newly-created study plan.

Add users

Users are added to *Introduction to Statistics* from a text file that you prepare. Clicking this button opens a dialogue that asks for the name and location of the file and adds the users immediately.

The file describes each user on a separate line in the following format:

PIN, Name, Path to the folder that will hold the user's personal file

These three elements must be separated by commas and the file should have the extension .CSV (comma-separated values).

PIN: This must be a 5-digit number, not beginning with 0.

Name: This can be up to 20 characters long and **must not contain commas**.

Path: This must begin with a drive letter and end with a backslash (\) character.

The most convenient way to create the CSV file is with a spreadsheet program. Enter these three elements into the first three columns and save the spreadsheet in CSV format. Any number of users up to the institution's licensed total can be entered at one time or on separate occasions.

The installation CD contains a large number of suitable PINs that can be cut and pasted into the first column of the spreadsheet. Other numbers can be used, subject to certain conditions, but do not do so without reading the section on **PINs** on page 6 of the *Installation Guide*.

If there is any problem with the CSV file, *Tutor Tools* gives advice on what to do.

Example

```
85002,Mary Wilson,X:\WUTemp\StatBas\Students\  
36819,Najum Singh,X:\WUTemp\StatBas\Students\  

```

Note

- There should always be **exactly two** commas on each line separating its three elements.
 - Every line, including the last, must end with a **<return>** character.
-

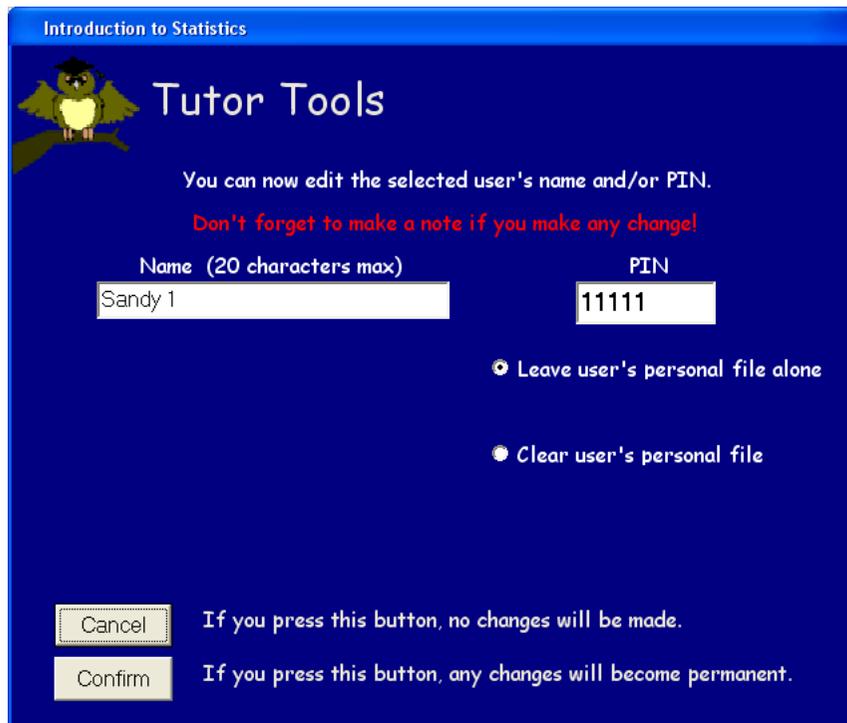
Notifying users of their PINs

The CSV file you create to add users can easily be formatted, printed out and cut into strips to notify users of their PINs

Delete users

This button is greyed and inactive in the screenshot because the currently selected user is a tutor, who cannot be deleted.

If a student is selected and the Delete **users** button is clicked, *Tutor Tools* asks for confirmation and marks the student for deletion if the request is confirmed. The student's name disappears from the list but is not yet removed from the system. Full removal of users from the system can be done only when running *Tutor Tools* in **System Manager Mode**, described later. It may not be necessary to remove users completely unless you need the space for new users. If a student is 'deleted' by mistake, it is possible to restore the name and personal records with *Tutor Tools* in System Manager Mode if complete removal has not been carried out.



Edit user

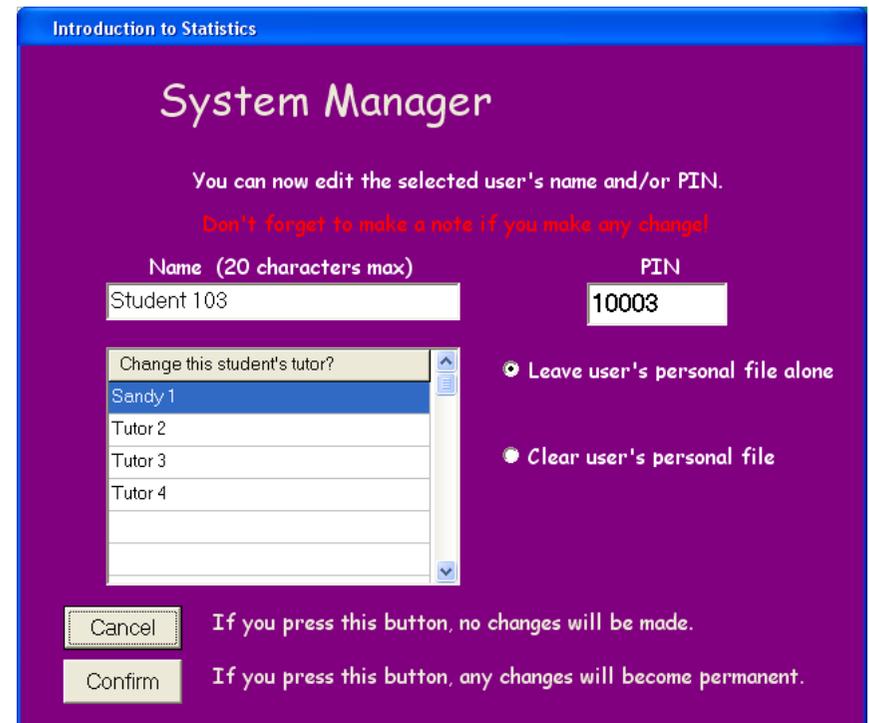
Clicking this button brings up the screen above. You can edit the user's name and/or PIN in any valid way: **PINs must have five digits and names must not contain commas**. You can also delete the user's personal file by selecting that option on the right. This might be useful if, (a) if the file has become corrupted, or,

However, permanent removal should be done sparingly since it locks all users out of *Introduction to Statistics* while it occurs and it cannot be reversed.

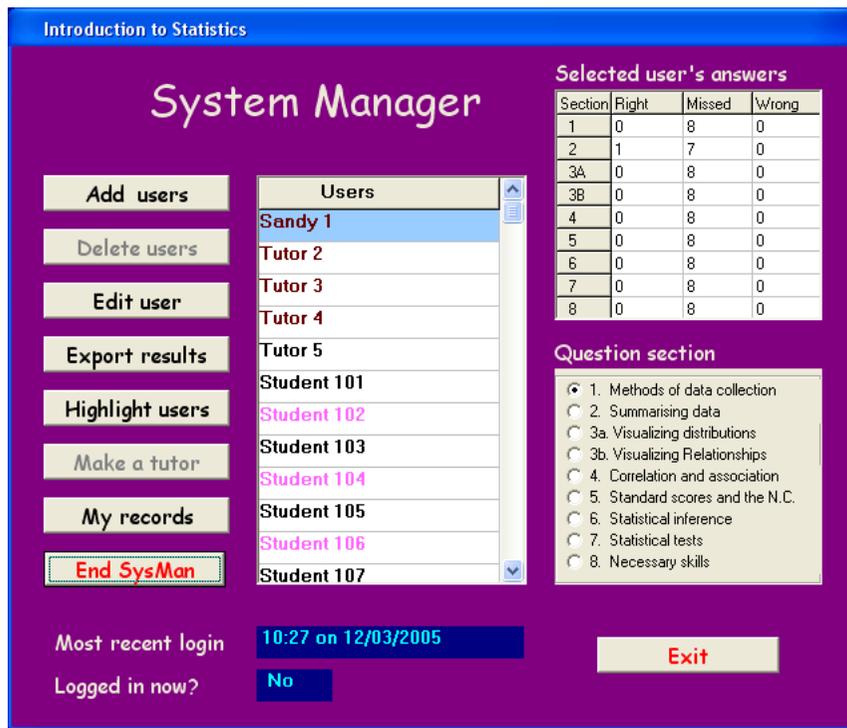
Users marked for deletion have not yet been removed from the system. All that has happened is that their PINs have been set to 00000.

In System Manager Mode, these users' names are seen and their PINs can be edited. Setting the PIN to a number other than 00000 restores the user to the list seen by that user's original tutor. If the new PIN begins with zero, the user cannot log in to *Introduction to Statistics* but the user's records remain visible to the tutor.

Since **tutor names** are visible in System Manager Mode, it is possible to edit tutors, change their PINs and so on. The order in which they are listed is that in which they were made into tutors, not their order in the CSV file that installed them.



Clicking **Edit user** while in System Manager Mode brings up the screen above to offer the additional option of **changing a student's tutor** (for instance if the student has changed classes). The current tutor is highlighted on entry. Clicking on another tutor to select the name and then clicking **Confirm** transfers the student to the selected tutor.



System Manager

The **System Manager** button is seen only by the person who installed *Introduction to Statistics* (or by anyone using that PIN, of course.) In a network installation, the actual System Manager must often exercise this facility, since some of its functions require special privileges on the network. However, in some small networks or single-computer installations it may be possible for any tutor to do so.

Whereas tutors see only their own records and those of their students, clicking the button to put *Tutor Tools* into **System Manager Mode** reveals all users in the installation. This includes (a) all tutors and their students and also (b) users who have been marked for deletion. The names of tutors appear in dark red type and those of users marked for deletion in light magenta type.

The last button in the column changes its name to **End SysMan** and allows a return to using *Tutor Tools* as a normal tutor.

If the **Delete users** button is clicked while in System Manager Mode, the option is given of marking only the currently-selected user for deletion or of permanently removing from the system all users who have been marked for deletion. **It is only this permanent removal that makes space for additional users** if you are approaching the limit of registrations allowed by your licence.

(b) in order to get rid of a former user and substitute a new one in a single step, rather than deleting one and installing the other with a CSV file.

If the personal file is deleted, a new one will be created automatically when the user next logs in to *Introduction to Statistics*.

A further option is offered if the student is recorded as being currently logged in, which is to mark the user as **not logged in**. This should rarely be needed but might be if a computer failure occurred while the user was logged in. In this event, the 'logged-in' marker can be left on even though *Introduction to Statistics* has ended and the user will be unable to log in again until it has been cleared by a tutor or the system manager using this option.

The **Edit user** button can be used to recover PINs that have been forgotten. The PIN is displayed but clicking **Cancel** leaves the user's details unaltered.

If a user's PIN is edited to a number beginning with zero, the user's records remain accessible to you but the user can no longer log in to *Introduction to Statistics*.

Export results

This button allows you to save your own and your students' test question results in a CSV file that can be read by any spreadsheet program. The results can then be tabulated, printed or analyzed as you wish. The dialogue that appears when you click this button allows you to choose a name and location for the file to hold the results. A default filename and a location in the **Tutors** folder are proposed by the dialogue and you can accept these or substitute your own choice.

Highlight users

Clicking this button changes the colour of the background on which user names appear, to give the following information:

- Red: The user is currently logged in to *Introduction to Statistics*.
- White: The user has never logged in to *Introduction to Statistics*.
- Grey: The user has logged in to *Introduction to Statistics* but has no correct answers in the question section currently selected (in the lower right panel).
- Pale green: The user has logged in to *Introduction to Statistics* and has some correct answers in the section currently selected.
- Bright green: The user has logged in to *Introduction to Statistics* and has correctly answered all questions in the section currently selected.
- Blue: The user is currently selected (This overrides any other colour. To see this user's highlighting, select another user.)

Make a tutor

This button notifies the system that the selected user is to become a tutor. Up to 20 tutors can be created.

When someone listed as one of your students is converted into a tutor, the name disappears from your list in *Tutor Tools* and that user becomes able to run *Tutor Tools*, add and edit users, convert them to tutors and so on. Obviously, this should be done only with users that you really intend to exercise Tutor functions.

It is preferable to install all tutors before any real students are added because converting someone to a Tutor after Students have been installed will slightly rearrange the order of students in some tutors' lists and they may find this inconvenient. This problem can be avoided by installing all tutors first. If it is uncertain how many tutors may be needed in the system, it may be advisable to allocate a few dummy names (such as 'Tutor 5' in the example here) and edit them to the names of real tutors when the need arises. Thus the **Make a tutor** button should ideally be used soon after *Introduction to Statistics* is first installed and not thereafter, though if necessary it can be used at any time.

Once converted to a tutor, the user cannot be removed from the system or converted back to a student. However, editing the PIN to any unused number beginning with zero makes that user unable to run *Introduction to Statistics* (though remaining able to run *Tutor Tools*). This can be useful when setting up 'dummy' tutors at installation time. When the need for a new tutor arises, the dummy's PIN can be given to the new tutor, who can then use it to run *Tutor Tools* and edit the name and PIN to appropriate new values.

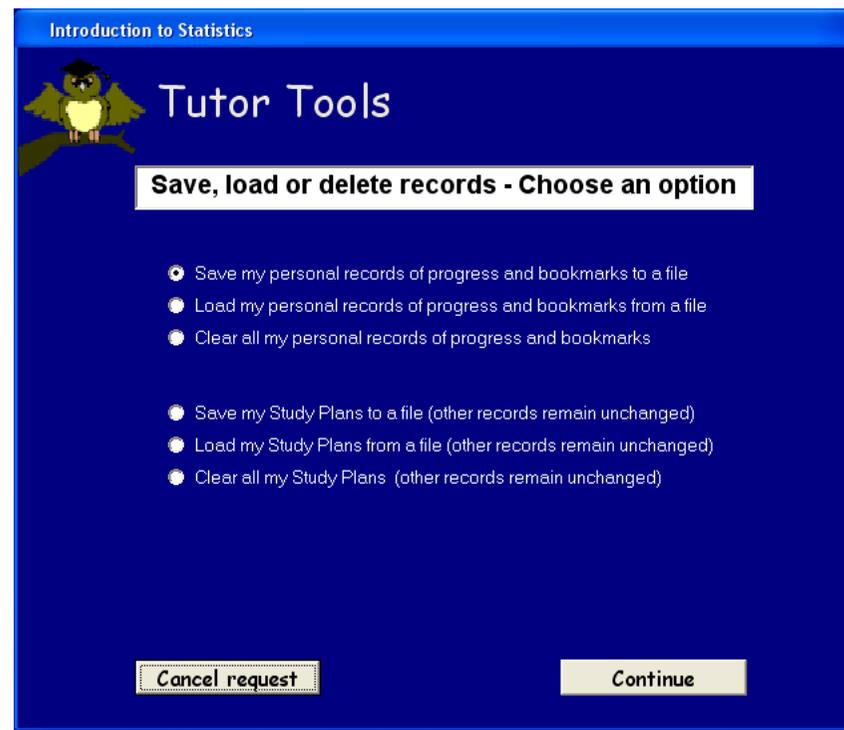
Tutors with two or more classes

If a tutor teaches more than one class with *Introduction to Statistics*, it is best to use different 'identities' for the purpose (though each counts towards any limit on the total number of users). If the tutor uses a different PIN for each class, the program treats each as a different user, though the tutor's **name** can be the same for each class.

Students added while using one PIN will see Study Plans that the tutor creates while logged in with that PIN and the tutor will see only those students when using *Tutor Tools* with that PIN.

Classes with two or more tutors

If more than one tutor uses *Introduction to Statistics* with a particular class, they should all use the same PIN for that purpose. In this way, they all see the same student records and are treated as a single user by the program. (Some ingenuity may be needed to fit more than one name into the 20 characters allowed!)



WARNING: If students encounter a problem that can be corrected by *Tutor Tools*, *Introduction to Statistics* may show the names of their tutor(s) and the System Manager as people to seek help from. **All names should therefore be in a form that you are content for students to see.**

My records

This button brings up the screen above, offering various options of saving and deleting your own records. You are not very likely to want to save your own records of progress but you might well want to save your **Bookmarks** or **Study Plans** at a particular stage in a course in order to make space for new ones, intending to load them again at the same stage next year.

It is also possible to use this facility to share your bookmarks or study plans with colleagues without having to re-create them each time.

A file of saved personal records has the extension **.spr** and one of saved study plans has the extension **.ssp**. To be loaded again, these extensions need to be preserved, but the **name** of the file can be anything you like. The dialogue proposes a name but you can change it if you wish.