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|   | **Q Cheat Sheet** |



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| **Key tips to get you started** | *Start a new project with your data* | 1. **File ▶ Data Sets ▶ Add to Project ▶ From File**
2. Select Automatically detect data file structure
3. (Optional) Choose from among **Advanced** options
 |
| *Modify the table* | In the **Outputs** tab choose the questions you want to show in the blue and brown question menus |
| *Duplicate the table* | Push the Duplicate table buttonin between the blue and brown drop down menus to make new tables |
|  | *Manipulate the table* | * Drag-drop categories and columns to move them and merge them
* Right-click to bring up menu of options (dependant on where you click)
* Highlight multiple categories with Shift or Ctrl, and then right-click
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| **What to do when you cannot figure out how to use Q** | *Right-click on whatever it is you are trying to change* |
| *Type into Search* |  |
| *Get help interpreting a table* | **Help ▶ Interpret This Table** |
| *Read the wiki* | **Help ▶ Q Wiki (Online Reference Manual)** |
| *Do some training modules* | **Help ▶ Online Training** |
| *Contact support* | support@q-researchsoftware.com  |

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| **Data files and file management** When you analyze data in Q you are always using two files:* Project file (.Q): this contains all the work you have done in Q.
* Data file (e.g.,.sav): this contains your survey data; Q does not change the raw data.
* A Q Pack (.QPack) is an archive of your Project and your Data
 | *Start a new project* | 1. **File** ▶ **Data Sets** ▶ **Add to Project** ▶ **From File**
2. Select **Automatically detect data file structure**
3. (Optional) Choose from among **Advanced** options
 |
| *Starting using a QPack* | 1. Double-click on the QPack *or* **File ▶ Open ▶ Existing Project**
2. **File** ▶ **Save**
3. Read any messages carefully (as you may destroy work)
 |
| *Opening a project* | **File ▶ Open ▶ Existing Project** or **Recent Projects** |
| *Share projects* | **File ▶ Share** This sends the project and data files (as a Q Pack) |
| *Update the data in a project* | **File ▶ Data Sets ▶ Update** |
| *Merge different projects* | Open two copies of Q and drag and drop tables and variables from one project to another |
| *Merge data files* | **Tools ▶ Merge Data Files** |
| *Stack data* | **Tools ▶ Stack SPSS Data File** |
| *Panel data (e.g., occasion-based data)* | 1. Stack the data (if necessary)
2. **File ▶ Data Sets ▶ Add to Project ▶ From File**
3. **File** ▶ **Data Sets ▶ Edit Relationships**
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| **What to do when the data looks wrong** | *Contact the person that set up the project (if you did not do it yourself)* |
| *Check the base*  |  |
| *Check* **n** *and* **base n** | **Statistics – Cells ▶ n** or **Base n** |
| *Check statistical testing* | **Edit ▶ Project/Table Options ▶ Statistical Assumptions** |
| *Check that the* **Question Type** *setting**makes sense on the* **Variables and Questions** tab | Either go to the **Variables and Questions** tab and find the data, or, press  to the right of the relevant dropdown menu |
| *Check that the* **Filter** *is correct*  | E.g.,  |
| *Check that the* **Weight** *is appropriate* | E.g.,  |
| *Check that the correct rules are applied and, try and remove the rules* | If a Rule has been applied, a pink Rules tab will appear at the bottom of the table. Control when applied using the **Apply** dropdowns |  |
| *Hide or unhide variables* | On the **Variables and Questions** tab, press  |
| *Check if empty rows/columns are are hidden* | Check to see if is depressed (this hides empty rows and columns) |
| *Review the* ***Value Attributes*** | Right-click on a row or column heading and select **Values** |
| *Review how a variable has been constructed* | 1. Go to the **Variables and Questions** tab
2. Find the variable
3. Right-click: **Edit** **Variable**
 |
| *Contact support* | **File ▶ Share ▶ Send To Support (encrypted)** and indicate which table and which cells in the table look wrong and why |

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| **Tables and plots**Note that the one of the main ways of modifying a table is to change the data in the table, and when this is done all other tables using the same data will also change (see Manipulating Data) | *View additional statistics* | Right-click: **Statistics – Cells/Right/Below** ▶ |
| *Duplicate a table* | Push the Duplicate table button in between the blue and brown drop down menus to make new tables |
| *Changing the data* | Choose the questions you want to show in the blue and brown question menus  |
| *Create plots in Q* | Select from **Show Data As** (top middle of the screen) |
| *Customizing the look and feel of tables* | **Edit ▶ Project Options ▶ Customize** and **Table Styles** |
| *Lock the dropdowns used to select data on a table* | Right-click on table(s) in the *Report* and select Lock |
| *Create folders* | Right-click on a table in the *Report* and Add group |
| *Create lots of tables* | Create **▶** Tables ▶ Banner Tables (this also automatically creates banners and flattens data – see Manipulating Data) |
| *Simultaneously change lots of tables/plots* | Select them all at the same time and then modify as normal (e.g., apply filters, right-click and **Statistics – Cells**) |

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| **Weights and filters**Weights and filters can be applied to the entire project or to selected tables and plots. | *Applying filters and weights* | In the **Outputs** tab highlight a table/chart in the report tree and then select from the Filter or Weight menus. If applied, the filter/weight will be indicated in green. |
| *Creating a weight* | Create ▶ Variables and Questions ▶ Variable(s) ▶ Weight |
| *Allowing variables to be selectable as weights and filters* | In the **Variables and Questions** tab, press  |
| *Creating simple filters* | **Automate** ▶ **Browse Online Library** ▶ **Filtering** ▶ **Create Filters from Selected Data** |
| *Creating filters from a table* | Create a table, select the relevant cells and press   |
| *Creating complicated filters (eg: filters involving more than 2 variables, with OR, NOT and AND statements)* | Create ▶ Variables and Questions ▶ Variable(s) ▶ Binary – Complicated Filter |

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| **Visualizations** | *Convert a table into a plot* | 1. Select a **Table**.
2. Choose an option from the **Show Data As** menu.
 |
| *Interactive and Advanced Visualizations*  | 1. Create ▶ Charts ▶ Visualizations ▶ …
2. Select the new R object in the Report Tree.
3. On the right hand-side in the Object Inspector, link it to a table or variables

1. Click (hint: you can set Calculate to ‘automatic’ so it automatically updates if you change the input table/variables)
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| **Viewing raw data** | *Seeing the raw data for a question* | In the **Outputs** tab **Brown dropdown** menu: **RAW DATA** |
| *Seeing raw data for lots of variables in Excel* | 1. Select the variables in the **Variables and Questions** tab
2. Right-click: **Export variables to Excel**
3. In Excel: **VIEW** ▶ **Freeze Panes** ▶ **Freeze Top Row**
4. In Excel: **DATA** ▶ **Filter**
 |
| *Seeing all the raw data in Q* | All the raw data is viewable on the **Data** tab. You can sort columns, show filters and re-order the columns (this is done on the **Variable and Questions** tab) |

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| **Exporting**Any chart templates that you create in Excel, PowerPoint and Word, are available in the **Format** dropdown that appears when exporting. See also **Viewing raw data.** | *Export to PDF* | **File ▶ Export ▶ To PDF** |
| *Export to Excel, PowerPoint and Word*  |   |
| *Automatically update Office exports* | Ensure the Office document is open and export the relevant tables/charts again. If Q can detect them as being already exported to the document, it will give you the option to Update. See the Q wiki for more details on automatic updating. |
| *Setting default chart types for Office* | 1. Create *Chart Templates* using Excel, Word or PowerPoint
2. **Edit** ▶ **User Options** ▶ **Export Chart Defaults**
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| **Manipulating data**There are lots of tools for manipulating data. These are only some of the more commonly-used basic tools. | *Merging* | **I**n the **Outputs** tab: Drag and drop, or, right-click: **Merge** |
| *Creating NETs* | **I**n the **Outputs** tab: Right-click: Create NET |
| *Sorting/Re-ordering categories* | **I**n the **Outputs** tab:* Drag and drop
* Right-click: **Sort By**
* See *Using Rules* on how to automate the sorting of categories on a table
 |
| *Removing a category and rebasing* | **I**n the **Outputs** tab:* Right-click: Remove (only for mutually exclusive options)
* Filtering: Create a NET and right-click on it: **Create filter**
 |
| *Removing a category without rebasing* | **I**n the **Outputs** tab: Right-click: **Hide** |
| *Switch between % and averages as main statistics on a table* | **I**n the **Outputs** tab:1. Right-click on the row or column headers on the table
2. Select the question (its name will appear near the bottom of the menu)
3. Select **Restructure data** and the appropriate option
 |
| *Creating a 2nd version of a question* | **I**n the **Outputs** tab: Right-click on table row/column heading: Duplicate Question |
| *Banding numeric variables* | 1. See *Creating a 2nd version of a question* above
2. See *Switch between % and averages as main statistics on a table* above
3. Merge the rows together according to the desired bands – See *Merging* above
 |
| *Recoding (changing* Value Attributes*)* | **I**n the **Outputs** tab: Right-click on table row/column heading, select Values and change the numbers in the Value column |
| *Create a banner* | **I**n the **Outputs** tab:1. Create a new table
2. Create ▶ Banner▶ Drag and Drop
 |
| *Create a new variable* | * Variables &Questions tab: Create ▶ Variables and Questions ▶ Variable(s) ▶ JavaScript Formula ▶ Numeric
* Search the Q Wiki for “JavaScript variables” to see examples of basic code
 |
| *Recoding into a different variable* | In the Variables & Questions tab: 1. Right-click: Copy and Paste Variable(s) ▶ Exact copy2. Modify the variable as per your needs |
| *Standard mathematical functions* | In the Variables & Questions tab: Insert Ready-Made Formula(s) ▶ Mathematical Functions (by Case) |
| *Creating a binary variable* | Follow the steps for creating filters in Weights and Filters |

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| **Automation in Q**Q brings efficiencies to your quantitative workflow in many ways. For more information, search the Q wiki and blogs for ‘Automatic’ | *Using Rules*  | * Example: Automate ▶Online Library **▶ Sorting and Reordering** **▶ Sort Rows (Automatically Updates when Data Changes)**
* If a Rule has been applied, a pink Rules tab will appear at the bottom of the table
 |
| *Using QScripts*  | Example: Automate ▶Online Library **▶ Create New Variables ▶ Create Top 2 Category Variables**  |
| *Updating your analysis* | **File ▶ Data Sets ▶ Update** (and replace the datafile) |
| *Automatic Updating of PowerPoint* | See: **Exporting** |
|  | *Automatic Updating of R* | * R objects in the Report Tree will turn grey if out of date (if the source changes)
* If you want the output to update automatically, tick the **Automatic** box
* If you want to run your calculation manually, leave the box un-ticked
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| **Doing Calculations in R**You can use R to do custom calculations, and many options below also use R. | *Prepare the data* | **Question Type** and **Variable Type** determine how variables will be used in R calculations:* For *Numeric* variables, choose **Number**, **Number – Multi,** or **Pick Any**
* For *Factors*, choose **Pick One** or Pick One – Multi
* For *Ordered Factors*, also change the **Variable Type** to **Ordered Categorical**
 |
| *Custom Calculations* | **Create ▶ R Output**Refer to variables and tables by name to use them in your calculation:* For variables, check the **Name** column in the Variables & Questions tab
* For tables, right-click in the *Report* and select **Reference name**
 |
| *Standard R* | Items in the **Create** menu marked with use R to run the analysis |
|  | *Automatic Updating* | * If you want the output to update automatically when the data changes, tick the **Automatic** box
* If you want to run your calculation manually, leave the box un-ticked
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| **Advanced Analyses**All are found under the **Create** menu. Many advanced analyses use R and show the symbol. Some advanced analyses do not use R.  | *The advanced analyses that use*  | * Link the analysis up to source data (table, variables), as per the steps in in *Interactive and Advanced Visualizations*
* In the Object Inspector on the right, you can view and edit the R Code. Go to **Properties > R Code**
 |
| *Further documentation, videos and worked examples are available on the wiki:* [wiki.q-researchsoftware.com](http://wiki.q-researchsoftware.com/) as well as the Displayr Blog: [www.displayr.com/blog](http://www.displayr.com/blog)  |

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|   | **Question Types** |

The way that Q presents data is determined by the underlying Question Type of the data. Question types are set automatically when importing data and can be modified in the Variables and Questions tab.

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| Question Type | **Description** | **Example** |
| Text | Each observation in the data file contains text. | What is your name? \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Text – Multi | Multiple related fields of text for each observation in the data file. | Please type in the names of your three favorite soft drinks1.\_\_\_\_ 2. \_\_\_\_ 3.\_\_\_\_ |
| Pick One | A set of mutually exclusive and exhaustive categories (i.e., *nominal* or *ordinal* scales). | Are you... 🔾 Male 🔾 Female |
| Pick One – Multi | A series of Pick One questions sharing the same scale points. | Please rate your satisfaction with the following airlines: Low Med HighUnited 🗖 🗖 🗖British Airways 🗖 🗖 🗖Qantas 🗖 🗖 🗖 |
| Number | A numeric variable (i.e., *interval* or *ratio* scale). | How many glasses of wine did you drink last night? \_\_\_\_  |
| Number – Multi | A series of numeric variables measured on the same scale. | Next to the brands below, please indicate how many times you have purchased them in the past weekCoke \_\_\_ Pepsi \_\_\_ Fanta \_\_\_ |
| Pick Any | What is usually referred to in market research as a multiple response or multi question. Respondents are asked to pick all that apply from a list of options.  | Which of the following have you bought in the past week?🗖 Coke 🗖 Pepsi 🗖 Fanta |
| Pick Any – Compact  | Same as Pick Any but stored in a more compact format (see the *Q Reference Manual*). |
| Pick Any – Grid | A set of binary variables that can be thought of as being ordered in two dimensions (e.g., a Pick Any question asked in a loop). | Which of these brands are cool?🗖 Coke 🗖 Pepsi 🗖 Fanta Which of these brands are young?🗖 Coke 🗖 Pepsi 🗖 FantaWhich of these brands are sexy?🗖 Coke 🗖 Pepsi 🗖 Fanta |
| Number – Grid | A question requiring numeric responses, where the variables can be thought of as being ordered in two dimensions (e.g., a Number – Multi question asked in a loop).  | In the past month, how many *economy flights* did you take on...Qantas \_\_\_ United \_\_\_ Delta \_\_\_…and how many *business class flights* did you take on...Qantas \_\_\_ United \_\_\_ Delta \_\_\_ |
| **Date**  | A question containing a date. | What is your date of birth? \_\_\_\_ / \_\_\_\_ / 19\_\_\_\_ |
| **Ranking** | Multiple numeric variables that represent a ranking, where the highest number is most preferred and ties are permitted. | Rank the following brands according to how much you like them... Coke \_\_\_\_ Pepsi \_\_\_\_ Fanta \_\_\_\_ |
| **Experiment**X | A Number, Number – Multi, Ranking, Pick One or Pick One – Multi question, where the alternatives presented were varied using an experimental design. | Which of these would you buy?

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| Coke$2.00Can | Pepsi$4.20Bottle | Fanta$3.20Flask |

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