Q Cheat Sheet

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 Country SUMMARY
	Duplicate the table	Duplicate Push the Duplicate table button in 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

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	Search features and data
	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

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**

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	base n = 0; total n = 13; 13 missing; 88% filtered out;
	Check **n** *and* **base n**	**Statistics – Cells ▶ n** or **Base n**
	Check statistical testing	Show significance: Compare columns **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., Filter: Q8. One or more message not recalled
	Check that the **Weight** *is appropriate*	E.g., Weight: None
	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 Table Rules
	Hide or unhide variables	On the **Variables and Questions** tab, press H
	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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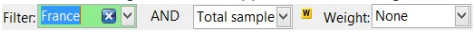
Tables and plots

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**)

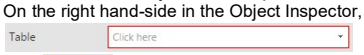
View additional statistics	Right-click: **Statistics – Cells/Right/Below ▶**
Duplicate a table	Push the Duplicate table button in between the blue and brown drop down menus to make new tables
Changing the data	Choose the questions you want to show in the blue and brown question menus
Create plots in 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**)

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**

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  4. Click (hint: you can set Calculate to 'automatic' so it automatically updates if you change the input table/variables)

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)

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	In the **Outputs** tab: Drag and drop, or, right-click: **Merge**
Creating NETs	In the **Outputs** tab: Right-click: **Create NET**
Sorting/Re-ordering categories	In 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	In 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	In the **Outputs** tab: Right-click: **Hide**
Switch between % and averages as main statistics on a table	In 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	In 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***)*	In the **Outputs** tab: Right-click on table row/column heading, select **Values** and change the numbers in the **Value** column
Create a banner	In 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 copy** 2. 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**

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

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

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 as well as the Displayr Blog: 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.

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 drinks 1.____ 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 High United ☐ ☐ ☐ 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 week Coke ___ 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 – Compac	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 ☐ Fanta Which 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	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? Coke $2.00 Can | Pepsi $4.20 Bottle | Fanta $3.20 Flask

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