|  |  |
| --- | --- |
|  | **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 |
| 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 |

|  |  |  |
| --- | --- | --- |
| 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**](mailto: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 |  |
| 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 | Go to the **Variables and Questions** tab  Find the variable  Right-click: **Edit** **Variable** |
| Contact support | **File ▶ Share ▶ Send to Support (encrypted)** & indicate which table and which cells in the table look wrong and why |

|  |  |  |
| --- | --- | --- |
| 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 & 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** |

|  |  |  |
| --- | --- | --- |
| 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 | **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 | 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 at** [**wiki.q-researchsoftware.com**](http://wiki.q-researchsoftware.com) **as well as the Displayr Blog at** [**www.displayr.com/blog**](http://www.displayr.com/blog)



|  |  |
| --- | --- |
|  | **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?  \_\_\_\_ glasses |
| 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 – Compact | Same as Pick Any but stored in a more compact format (see the Q Reference Manual). | 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  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?   |  |  |  | | --- | --- | --- | | Coke  $2.00  Can | Pepsi  $4.20  Bottle | Fanta  $3.20  Flask | |