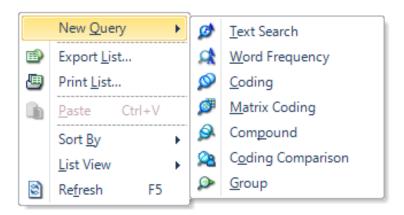
Mapping the (advanced) options in queries

In Chapter 11 of *Qualitative Data Analysis with NVivo* we describe the overall purpose and function of queries, their common features, and an overview of three groups (and seven types) of queries. Along the way, we point you to other chapters where queries are presented so you can consider them in the context of a practical example. We also point you to the NVivo Help files for additional detail on constructing and running the queries.



In this supplement, we detail options across the queries, including the more advanced choices offered. We include this for the sophisticated qualitative methodologists, the adventurous techies, and those 'systems thinkers' who just have to know everything. If you are satisfied with the broad view of queries in the book or the Help files and want to move more quickly into working with your data, you may find this information superfluous and irrelevant until you are managing a query that isn't quite able to handle your specific needs. Alternatively, you might peruse these options to develop ideas about what you can do with a query in your research, and you might also return here if you encounter one of the advanced options while constructing a query and would like additional information about the option. Without a good foundational understanding of the queries, however, this supplement isn't likely to help you, so please refer to the book or the help files first.

The features we review here are available in two of the tabs within the queries. The *Criteria* tab is available in all of the queries and the *Options* tab is available in four of the seven queries. Treat what follows as a kind of road map of what is possible. Details of how to 'travel the road' are available either in the book, or in the help files.

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Criteria tab

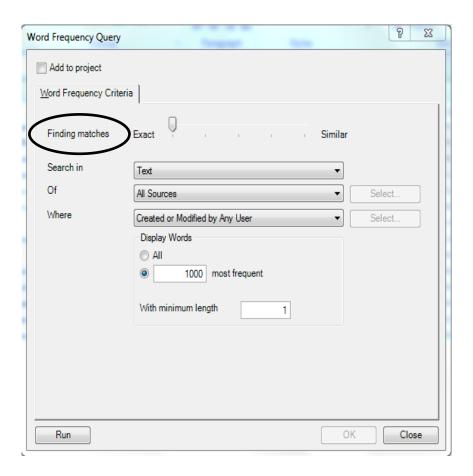
Nine advanced options, of two types, are available in the *Criteria* tab of the queries. There are those that set the primary criteria for the query by telling NVivo what text or coded content to look for, and those that set the scope by telling NVivo where to look. In any one query you will find only a subset of these nine options. A table of the intersection between the queries and the options is provided at the end of this section. In the summaries below we

- identify the query or queries where you will find the option;
- provide a brief description of the option;
- note the default selection established by NVivo;
- explain the alternative selections.

Criteria tab - identifying text items to look for

Finding matches

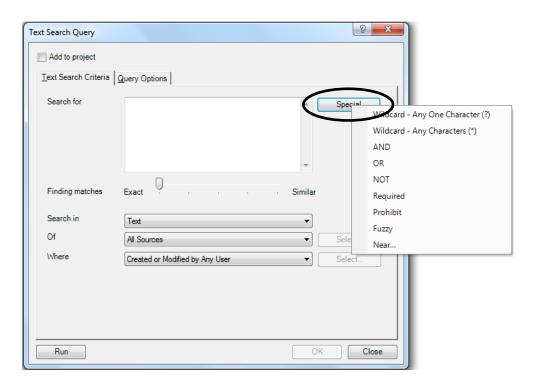
 Available in the <u>word frequency</u> and <u>text search</u> queries. Based on a database called Wordnet that was developed by a researcher at Princeton.



- This option makes no distinction between nouns, verbs, etc. For instance, fish is both a noun
 and a verb. Therefore, if searching for the word fish, as you move the pointer in the slide bar
 through the options from left to right, you will get:
 - Exact match only (default) will find only the specific string (e.g., fish).
 - o **Including stemmed words** will find the word and any with the same root (e.g., fish, fishing, fished).
 - Including synonyms will find the word, stemmed words, and any synonyms (e.g., fish, fishing, fished, catch).
 - Including specializations will find the word, stemmed words, synonyms and subcategories (e.g., fish, fishing, fished, catch, salmon, halibut, tuna).
 - o **Including generalizations** will find the word, stemmed words, synonyms, subcategories and umbrella terms (e.g., fish, fishing, fished, catch, salmon, halibut, tuna, animal).
- Each time the pointer in the slide bar is moved to the right, the search finds all of the words in the preceding selections (to the left).

Special

This button is available only in the <u>text search</u> query.



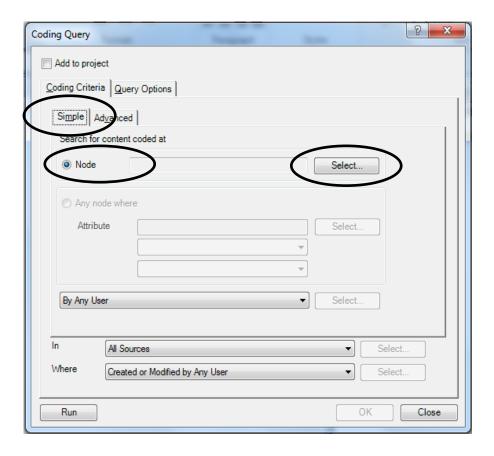
- Allows you to customize the way you look for strings of characters in the data, thus:
 - Wildcard Any One Character (?) finds the word as long as it has a character in the position represented by the "?" (e.g., analy?e finds analyse and analyze).
 - Wildcard Any Characters (*) finds the word and any words with the same initial string
 of characters (e.g., fisher* finds fisher, fisherman, fisheries, but not fishnet).
 - AND finds multiple words or phrases that must all occur in the same source (e.g., fish AND catch AND "sport fishing" finds these but only in sources that contain all three terms).
 - OR finds multiple words or phrases in the same search, used as an alternator (e.g., fish OR catch OR "sport fishing" finds every occurrence of these, even if only one of the terms is present in a source).
 - NOT finds a word or phrase only if the second word or phrase is not present in the same source (e.g., fish NOT commercial finds the term fish in any source as long as commercial is absent from the source).¹
 - Required finds the first word or phrase. It also finds the second word or phrase but only
 if it appears in a source where the first word or phrase was present (e.g., +catch fish
 finds catch wherever it occurs, and it also finds fish as long as this word occurs in a
 source where catch occurs as well).
 - Prohibit finds the second word or phrase as long as the first word or phrase is not present in a source (e.g., -fish catch finds catch but only in sources where fish is absent).¹
 - Fuzzy finds any word with a subset of letters from the specified word, as long as the letters are in the same order. This is often to accommodate typos (e.g., a search for salmon~ will find samon, but it will also find the word sermon).
 - Near... finds pairs of words if they are within a specified distance (e.g.,
 "fisheries policies"~25 will find all instances of fisheries and policies within 25 or fewer
 words of one another). Using two text queries within a compound query often provides
 more useful proximity options than Near.
- See the NVivo help files on *Special characters and operators* for keystrokes that may be used instead of (and in addition to) the above parameters.

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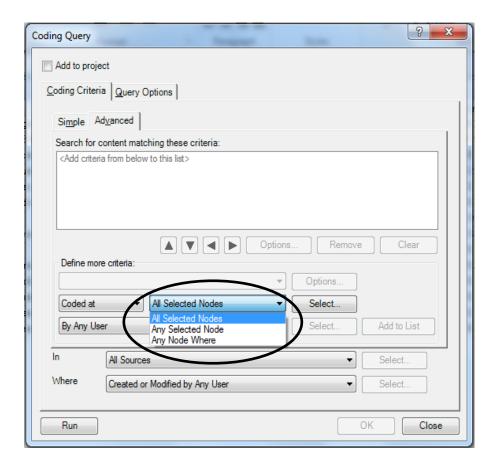
¹ NOT and Prohibit use different syntax to accomplish the same thing.

Criteria tab – identifying what coded content to look for

- Allows you to choose the nodes you want to include in the logic of a coding query.
 - Node available in the Simple tab of a <u>coding query</u> only, allows you to choose one node only. Use this when you want to see that node only within a particular scope, to be specified under In (e.g., when you want to review only what your literature had to say about a topic), or when you want to use a coding query as a subquery in <u>compound</u> <u>query</u>.



All Selected Nodes, Any Selected Node – available in the Advanced tab of a coding query only. Use this when you want to combine nodes in particular ways, including when you use a coding query as a subquery in a compound query (e.g., when you want to search for a word or words but not if they are already coded at any of a number of nodes).

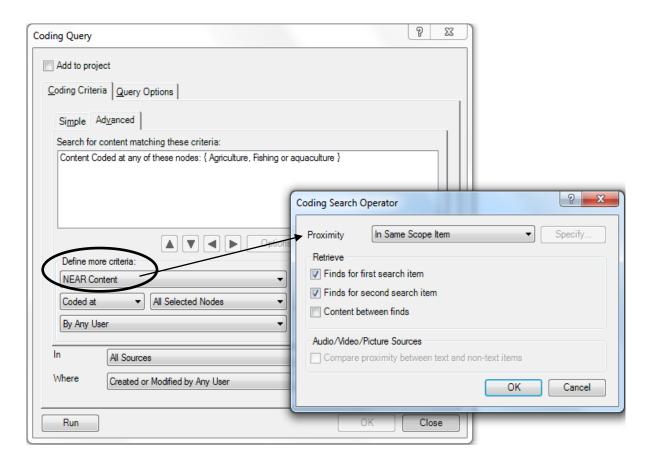


- All Selected Nodes requires that all nodes chosen are applied to the same portion of the source (equivalent to the Boolean AND)
- **Any Selected Node** requires that the data at any of the chosen nodes is included, regardless of whether this data intersects or not (equivalent to the Boolean OR)
- Any node where available in Simple and Advanced tabs of a <u>coding query</u>, limits the search to any (classified) node with or without a particular attribute value (an additional form of scoping), e.g., you might search for content coded at Landscape AND Connection to Down East AND Coded at Any node where Person: Generations Down East = 1. All three criteria have to be met.

Criteria tab – identifying how to combine content items

- Allows you to specify the relationship that must exist between nodes (or subqueries), if the content is to be selected.
- Available in the coding and compound queries.
- Available in the <u>matrix coding</u> query on the **Node Matrix** tab.

Options for combining



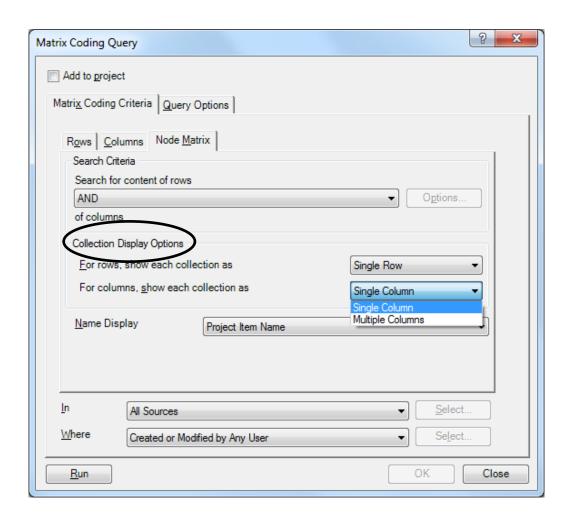
- Under **Define more criteria** (coding query) or the **Node Matrix** tab (matrix coding query)
 - AND (default) finds content as long as it is coded by all specified nodes
 - o **OR** finds content coded by any of the alternative nodes
 - AND > NOT coded at (coding query), NOT (compound and matrix coding query) finds content coded at the first node(s) as long as it is not coded at the second node(s).
 - NEAR finds content within a specified proximity
 - **Overlapping** (default) finds all the text at each node as long as some of the text in each find is coded at both
 - **In Custom Context** allows you to specify degree of proximity between the coded passages for each node, e.g., number of lines, paragraph (or multimedia equivalents).
 - **In Same Scope Item** will find content of both nodes if they are both present anywhere within any items specified within the scope (e.g., usually sources).
 - **In Same Coding Reference** finds coded passages from two nodes provided both nodes are located within a passage (coding reference) that is defined by the scope;

it requires that you have nodes as your scope and it will look for matches within any passage coded by any of those nodes

- PRECEDING has the same sub-options as NEAR, but the first node must appear before the second.
- SURROUNDING finds content at the first node as long as its content completely surrounds content for the second node.

Collection display options

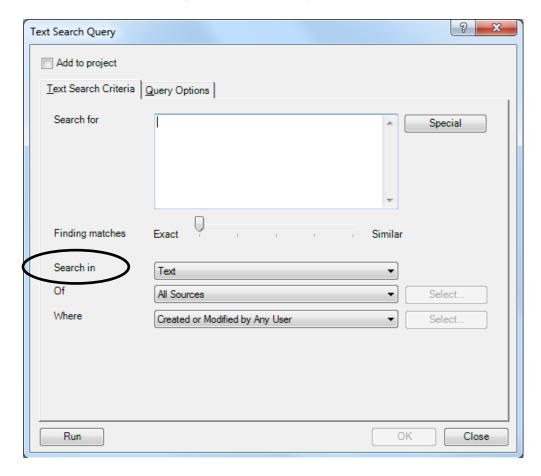
- Available in <u>matrix coding query</u> only, on the **Node Matrix** tab, used when the content criteria selected for rows or columns includes a <u>set</u> or <u>search folder</u>.
- For rows (and columns), show each collection as
 - Single Row (default) will treat all the content of the collection as if it were a single item.
 - o **Multiple Rows** will report on each item of content within the collection in a separate row.



Criteria tab - identifying where to look

Search in

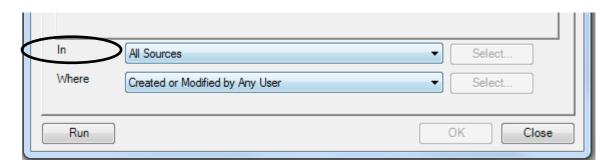
• Available in the word frequency and text search queries.



- This text-mining feature allows you to include or exclude types of text.
 - Text (default) limits the query to look only in the text within the content of your internals, externals and memos.
 - Annotations limits the query to look only in the annotations you added to the project.
 - Text and Annotations broadens the query to look in both the content of the text and the annotations.

In, Of, Scope (located on the Criteria tab under the content selection panel)

• The only advanced feature from the criteria tab that is available in <u>all seven queries</u>.



- Allows you to determine the items in the database that will be included in the pool of data that is considered during the query.
 - All Sources (default) allows a query to examine all of the items in internals, externals
 and memos and is the default in the query.
 - Selected Items allows a search within only the specific items you then choose via the select project items window. These can be individual sources, nodes, sets, or search folders.
 - Items in Selected Folders (or just Selected Folders) allows a search within only whole folders you then choose via the select project items window. These can be Source folders (e.g., Internals\\Interviews, or Memos) or specific Node folders (including Relationships and Results). This does not allow you to identify particular items within the folder, so if you need to select only some of the specific items, you should use Select Items instead.
- The following options are set out in this way only in the <u>coder comparison query</u>, as a means of selecting sources to include in the comparison. You will see them under **Scope**.
 - All Sources (default) allows a query to examine all of the items in internals, externals and memos and is the default for the query.
 - Selected Sources allows a search within only the specific sources you choose via the select project items window.
 - Sources in Selected Folders includes all of the sources in the folder you choose.
 - Sources in Selected Sets includes all of the sources in the set you choose.
 - Sources Assigned to Selected Classifications includes all of the sources with the source classification you choose (you cannot use this to select sources with a particular attribute value within a classification).
 - Sources in Selected Search Folders includes all of the sources in the search folder (a type of collection) you choose.

• In the group query, the finds (specified using **Range**) will be organized under each item included in the **Scope**.

Where

- Available in word frequency, text search, coding, matrix coding, and compound queries.
- This is another type of scoping or filtering tool, but it allows you to limit or expand the items
 to be searched during the query based on the activity of users in the database.
 - Created or Modified by Any User (default) includes all data and is the default in the query.
 - Created by Selected Users allows you to choose items that were *created* by a specific user (or multiple users).
 - Modified by Selected Users allows you to choose items that were most recently modified by a specific user (or multiple users).
 - Created or Modified by Selected Users allows you to choose items that were either created or most recently modified by a specific user (or multiple users).

Range

- Available in <u>group query</u>, only. The group query allows you to create seven kinds of lists of items (such as the nodes present in one or more other nodes, or in one or more internals; the see also links present in one or more of your memos; the items present in one or more of your models).
- Range allows you to choose the items that might be included in the list(s) created by the group query. Because of these seven list choices, the **Range** of items to include in the lists varies widely. Rather than list which of the six possible ranges are available in each of the seven different lists it is more important here to note the two **Range** options available in all seven lists. These options allow you to select exactly what you want to see.
 - Selected Items lets you choose the specific items to appear in the list via the select project items window.
 - Selected Folders limits the items in the list to those within the folders you chose via the select project items window. This does not allow you to identify particular items within the folder, so if you need to select only some of the specific items, you should use Selected items instead.

Coded by

- Available only in group query (although it is similar to 'Where').
- This choice appears in two of the seven group query lists (Items Coding and Items Coded At).

- Allows you to limit or expand the items to be listed based on the activity of users in the database.
 - o **Any User** (default) includes any user who has worked (or is working) in the database.
 - Current User includes only the current user.
 - Selected Users allows you to choose a user (or multiple users).

At

- Available only in <u>coding comparison query</u> as a means of selecting nodes to include in the comparison.
 - All Nodes (default) includes every node in the database (not a good idea!).
 - Selected Nodes includes all of the specific nodes you choose.
 - Nodes in Selected Sets includes all of the nodes in the set you choose.
 - Nodes Assigned to Selected Classifications includes all of the nodes with the selected classification – you cannot select for an attribute value.
 - Nodes in Selected Search Folders includes all of the sources in the search folder (a type of collection) you choose.

Summary of options available in the Criteria tab for the seven queries

	Frequency	Text	Matrix	Coding	Compound	Group	Comparison
Finding matches	х	х					
Special		х					
Search in	х	х					
Search criteria (for combining)			х	х	х		
In, Of, Scope	х	х	х	Х	х	х	х
Where (user)	х	х	х	х	х		
Range						х	
Coded by						х	
At							х

Query options tab

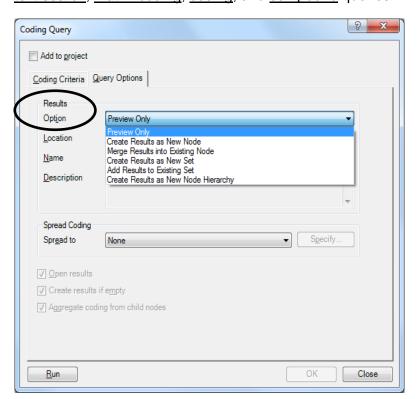
The **Query Options** tab is available in four of the seven queries (<u>text search</u>, <u>matrix coding</u>, <u>coding</u>, and <u>compound</u> queries). This tab provides options regarding what is included in your results, and the ways you can save the results of the query in your database.²

Four options are available in this tab, and in any one query you will find only a subset of the choices. A table of the intersection between the queries and the options is provided at the end of this section. You might peruse these options to develop ideas about what you can do with the results of your query, and you might also return here if you encounter one of the options while constructing a guery and would like additional information. In the summaries below we

- identify the query or queries where you will find the option;
- provide a brief description of the option;
- note the default selection established by NVivo;
- explain the alternative selections.

Results: Option

Available in text search, matrix coding, coding, and compound queries.



² The three queries that do not have a query options tab – word frequency, group, and coding comparison – will present a preview of the results, which you can either save elsewhere in the database or export and save outside of the database.

- Determines if, where, and in what configuration you want to save results in the database.
 - Preview Only (default) displays the results on the screen in the *Detail View* until you
 close them. While the results remain open, you can elect to save them using the rightclick menu.
 - Create Results as New Node creates a node from the results of the query (not available in matrix coding query – see below).
 - Merge Results into Existing Node adds the results of the query to a node that already exists in your project (not available in matrix coding query).
 - Create Results as New Set creates a set of all of the items (sources, etc.) in which
 there are data that satisfy the criteria of the query, for example, a set of all the sources
 containing the word sustainability. You may want to use this set of items for future
 inquiries in the database (not available in matrix coding query).
 - Add Results to Existing Set takes the items (sources, etc.) in which there are data that satisfy the criteria of the query and includes these items in an existing set (not available in matrix coding query).
 - Create Results as New Node Hierarchy Creates subnodes for each item (e.g., a source or a node, depending on the scope of the query in the criteria tab) in which there are data that satisfy the query criteria. (e.g., If you run a text query on fish in all sources and choose this option, the system will create a node fish with subnodes that divide up the results by source.)
 - Create Results as New Node Matrix (available only in matrix coding query) saves the results table in either Queries (in the Results folder) or Nodes (in the Node Matrices folder).

Results: Location

- Available in <u>text search</u>, <u>matrix coding</u>, <u>coding</u>, and <u>compound</u> queries.
- Determines the spot in the database where results will be stored, should you chose to store them.
 - Results (default) are stored in the Navigation View of Queries, and while you may choose to store items here you should know that you cannot create subfolders to organize the results, nor can you uncode or clean data when it is in this folder. (If you copy or move items later to the Nodes area of your project, you can then organize and recode or uncode the material.) Nodes stored in Results provide a 'fixed-in-time', archival picture of your data, even if your coding structure changes.
 - Nodes (not available in matrix coding query) is the top level folder in the *Navigation View* of Nodes. You can create subfolders (e.g., for results) in this location and you can uncode or clean the query results if they reside in this folder.

Node Matrices (available only in matrix coding query) is a folder in the Navigation View
of Nodes. You cannot create subfolders in this location, nor can you change the content
of any cell in the matrix, except by changing the input nodes and re-running the query.

Results: Name

- Available in text search, matrix coding, coding, and compound queries.
- If the query has been saved (Added to project), the saved results will adopt the same name

 modify (or add) as needed. If you run a query a second time, (2) will be added
 automatically to the name in the Results folder.

Spread Coding: Spread to

- Available in <u>text search</u>, <u>coding</u>, and <u>compound</u> queries.
- Expands the results beyond the data that immediately satisfies the criteria of the query to include surrounding material.
 - None (default) presents only the data that satisfies the query criteria.
 - Coding Reference (only makes sense when you include nodes in the scope of a query)
 allows you to expand the results to return the entire coded passage in which the find
 occurred.
 - Narrow Context extends the area around the results to a default of 5 words on either side in text documents, audio/video transcripts and photo logs; 5 seconds in audio or video sources; 5% of the pixels in a photograph; in a dataset it is the surrounding cell. You may change the default parameter for narrow in any of these data sources via the application options area of NVivo (Find menu).
 - Broad Context extends the area around the results to the entire paragraph if you are working with text. If you are working with audio or video sources the default is 20 seconds; in audio/video transcripts as well as a photo log, it is the surrounding cell; in a photograph it is 20% of the pixels; in a dataset it is the surrounding row. You may change the default parameter for broad in any of these data sources via the application options area of NVivo.
 - Custom Context allows you to extend the area around the results to suit your preference while you are constructing the query for any or all of the various data types.
 - o **Entire Source** extends the area around the results to the entire source.

Additional check boxes

Available in <u>text search</u>, <u>matrix coding</u>, <u>coding</u>, and <u>compound</u> queries, but only if you change the default for **Preview Only** (in the Option area above) to one of the other options.

- There are three possible check boxes (sometimes only the first two).
 - Open results (default) the output will be opened immediately after the query is run.
 Unchecking this box instructs NVivo to run the query, but to store the results for review later.³
 - Create results if empty (default) indicates that the results node or set should be created even if the query yields no results.
 - Aggregate coding from child nodes (not available in matrix coding) combines all of the data from the subnodes (e.g., where separate nodes have been created for members of a set) into the top level (or parent) node.

Summary of options available in the Query Options tab for the seven queries

	Text	Matrix	Coding	Compound
Results: Option				
- Preview Only	х	х	х	х
- Create Results as a New Node	х		х	х
- Merge Results into Existing Node	х		х	х
- Create Results as New Set	х		х	х
- Add Results to Existing Set	х		х	х
- Create Result as New Node Hierarchy	х		х	х
- Create Results as New Node Matrix		х		
Results: Location	х	х	х	х
Spread Coding	х		х	х
Open results*	х	х	х	х
Create results if empty*	х	х	х	х
Aggregate coding from child nodes*	х		х	х

^{*}Available depending on the selections made in **Results: Option**

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³ Unchecking this is recommended if you have already previewed the results before saving, as it is much faster if NVivo does not have to display results on screen.