

Cryptogrammer v1.1

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Introduction

Welcome to Cryptogrammer! Cryptogrammer was designed to make solving cryptograms easier and cleaner by automating everything except the thinking. It encodes a randomly selected quote into a cryptogram and allows you to solve it on your Mac. Erasing is easy, and you can change your mind and try out hunches easily without having to scribble all over a piece of paper. When you've solved a cryptogram, Cryptogrammer even tells you the source of the quote.

You can now enter your own cryptograms in addition to solving computer-generated ones. This way you can type in cryptograms from a newspaper and solve them using Cryptogrammer's interface.

Note: These instructions can be accessed on-line in a somewhat more limited form by choosing "Cryptogrammer Help" from the Apple menu.

Requirements

To use Cryptogrammer, you need System 7.0.1 or later and a Macintosh computer capable of running Color QuickDraw. You don't need a color monitor, but for best performance, your monitor should be set to run on at least 16 colors or shades of gray. Cryptogrammer won't run in black-and-white mode.

About Cryptograms

A cryptogram is a word puzzle in which a quotation, saying, or witticism has been encoded by substituting every letter with another letter. Your job is to figure out which 'cipher letters' represent which 'plaintext letters' to solve the cryptogram. A letter can represent any letter except itself, and no letter represents or is represented by more than one cipher letter in a given cryptogram. In addition, a letter never represents the letter that represents it — that is, if A represents B, B doesn't represent A.

Cryptograms appear frequently in puzzle sections of newspapers and magazines. The advantage of solving them on a computer is that you can easily erase your mistakes and try out hunches, without messing up the page. Cryptograms can be frustrating at first, but once you get the hang of them, they can be quite addictive...

See the section "Tips on Solving Cryptograms" for some hints on how to begin.

Getting Started: How to Use Cryptogrammer

It's pretty simple. When you run Cryptogrammer, you'll see a window with some buttons, a letter bank, and the cryptogram itself. As you fill in letters in the cryptogram, they'll appear automatically above the letters that represent them. Punctuation appears there from the start to make the plaintext more readable.

The buttons on the left of the Cryptogrammer window represent the cipher letters, the letters that appear in the encoded cryptogram. Notice that some buttons are dimmed and unavailable — those

represent letters that are not used in the puzzle. When you assign a plaintext letter to a cipher letter, the plaintext letter appears in a box next to the button for the cipher letter.

At the bottom of the window is the letter bank. In it are all the letters available to you — i.e., those you haven't matched up with anything yet.

To choose a match for a letter, first click on its button, then click on the plaintext letter (in the letter bank) that you want to match it with. All instances of the cipher letter in the cryptogram will be 'filled in' — your match will appear above them in the puzzle.

When you click on a button, you have selected it. To unselect it, click on it again. To select another letter, click on that one — the old one will be "unselected" automatically.

Once you've assigned a matchup, you can change your mind and assign a new matchup to the cipher letter by following the normal steps for matching up letters — Cryptogrammer handles the erasing for you.

Don't be confused by all this talk of buttons and plaintext and ciphers and letter banks — it's all pretty easy, once you play around with it a little.

Fancier Stuff: The Menus

File Menu:

New Cryptogram loses any changes you've made and pulls up a new cryptogram. You can choose to solve a computer-selected cryptogram, or you can enter in your own. See "User-Entered Cryptograms" for more information.

Reset Cryptogram clears any changes you've made but keeps the same cryptogram. It's the (cheaper) equivalent of buying a new newspaper and starting afresh.

Quit exits the program.

Edit Menu:

Undo undoes the last action you performed. When you choose Undo, it changes to **Redo** and you can redo the action you just undid.

Clear Match removes the match from the letter that's selected.

Cut, Copy, and Paste are dimmed and don't do anything, except when you're in the "New Cryptogram" dialog box.

Cryptogram Menu:

Get Hint reveals one correct matchup — either for a letter you haven't yet matched up or for one you've matched up incorrectly. This option is not available for user-entered cryptograms.

Give Up fills in the entire puzzle correctly for you. Use this option sparingly; often a hint or two can get you on the right track, and the satisfaction you'll get from solving a tough cryptogram outweighs the satisfaction you'll get from knowing the quote (inspiring as it may be). "Give Up" is not available for user-entered cryptograms.

Show Source tells you who wrote or said the quote (if its originator not in the cryptogram itself) and the book or context of the quote. This option is only available when the cryptogram is completed (i.e., when you've solved it or given up), and not for user-entered Cryptograms.

Show Frequencies displays a chart showing the most frequent letters, digraphs (2-letter combinations), and trigraphs (3-letter combinations) appearing in the puzzle. Only those appearing more than once are on the chart.

User-Entered Cryptograms

When you choose “New Cryptogram” from the File menu, you’ll be given a choice between solving a computer-generated cryptogram and entering your own (already in cryptogram form). Cryptogrammer will insert the line breaks automatically.

Your cryptogram may be up to 6 lines long, 28 characters per line. This can be deceptive — sometimes shorter cryptograms won't work because of the way the line breaks fall. Cryptogrammer will warn you if your puzzle is too long.

You may use any characters except the dollar sign (\$), which is used internally by Cryptogrammer. Lower-case letters will be converted to upper-case automatically, and nonalphabetic characters will be handled just as they are in computer-generated cryptograms. Also, the 'at' sign (@) is used to force a line break.

The "Get Hint," "Give Up," and "Show Source" commands in the Cryptogram menu are unavailable for user-entered puzzles. You can still use all the other commands, though.

Keyboard Alternatives

When you assign a match, you can type either or both of the letters (i.e. the cipher and/or plaintext letters) instead of clicking on them. Typing the letter that's currently selected unselects it. Be careful: It's easy to forget that a letter is selected and then try to select a new letter by typing it — if you do, you'll wind up matching up the two letters. (You can undo this easily with the 'Undo' command in the Edit menu, but it's best to be aware of what's selected and unselect it first).

Pressing the space bar when a letter is selected has the same effect as choosing 'Clear' from the Edit menu.

In addition, some menu items have keyboard equivalents.

Tips On Solving Cryptograms

Starting a cryptogram is usually the hardest part. In general, look for repeated words or patterns of letters and start there. One-letter words, which almost always represent 'A' or 'I', are an easy way to start, if they're there.

Here are some common patterns:

- A letter that starts several two-letter words is likely to be 'I', which appears in IN, IS, IT, and IF, or 'O', which appears in ON, OF, and OR. The pattern 'AB AC' is likely to represent 'IT IS'.
- The pattern 'AB'C' is probably 'HE'S' or 'IT'S'.
- A letter that ends several words is likely to represent 'S' or 'E'. 'E' appears in the next-to-last slot fairly often, too.
- 'ABCA' is probably 'THAT', especially if 'AB' also starts a three-letter word ('THE') or a four-letter word ('THIS'). 'ABCD CD' almost definitely represents 'THIS IS'.

As you do more cryptograms, you'll develop your own tricks. Good luck!!

Shareware Notice

The shareware fee for Cryptogrammer v1.1 is a flexible \$5. That means if you think it's worth more, you can send more, and if you think it's worth less, you can send less.

HOWEVER, what's most important to me is not the money but to know that you are using and enjoying Cryptogrammer. So if you're not sending money, I ask that you send me a postcard from your home town (or some other town) to let me know your thoughts. Any comments, good or bad, from an expert programmer or a computer dummy, will be greatly appreciated. Bug reports, too (although I cringe at the thought). See "Legal Stuff," below.

Anything you send me, from email to savings bonds, will be enough for me to consider you a

registered user and a great person.

Cryptogrammer v1.1 is shareware. As such, it may be distributed free of charge, provided that it is not altered in any way, that the documentation included with it is transferred as well, and that it is not distributed for profit without the written permission of the author.

I can be reached over the Internet (LVSNYDER@amherst.edu) until May 1997, and at the address below indefinitely. Thanks for using Cryptogrammer, and happy solving!

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Legal Stuff

Cryptogrammer is provided AS IS, with no guarantees regarding performance, compatibility, or suitability. The author may not be held responsible for bugs, crashes, damage to your system or to your computer, or any other problems you may have while running Cryptogrammer. You assume total risk when you use Cryptogrammer. If you don't like the deal, don't use the program.

That said, Cryptogrammer doesn't do any really weird stuff. It doesn't handle files, it doesn't fiddle with the system...it's just a game. So it's not likely to cause you major problems. To the best of my knowledge, Cryptogrammer won't crash. It's not the smoothest-running piece of software I've ever seen, but it should behave more or less as you expect it to. I have tested it only on a limited number of configurations and computers, since that's all I have available to me. Hopefully it will run on yours.

If you have problems, please send me bug reports at the address or Internet address listed above. Tell me what went wrong and, in as much detail as you can, the sequence of events leading up to the problem (e.g., "I selected 'M', chose 'Undo', went into a desk accessory, and then the cryptogram appeared in Sanskrit" would be a little more helpful than "It bombed out").

If you think it's relevant, please tell me as much as you can about your setup: computer model, extensions you're running, virtual memory, System software version, QuickDraw capabilities, etc. I'll try to correct the problem, but again, I make no guarantees.

Changes Since v1.0

v1.1.2 is identical to v1.1.1 except that my address changed.

v1.1.1 fixes a minor bug present in v1.1.0. The bug made it impossible to switch back to Cryptogrammer from another application when the Frequency Window was open.

The major changes from v1.0 to v1.1 are the frequency chart and the capability for the user to enter his or her own (encrypted) quotes.

Minor changes include cleaner window handling, menu updating, and screen drawing, the Cmd-R keyboard equivalent for "Reset Cryptogram" in the File Menu, and the addition of 250 new quotes, bringing the total number of quotes in Cryptogrammer's repertoire to 750.

Oh, yes, and Cryptogrammer is now (alas) shareware, not freeware. Please see above.

Acknowledgments

Thanks to my mom for giving me the idea for the program, to my dad for graphic design advice,

to Michael Abramowicz for all sorts of help with Mac programming, and to all of the above for testing (or playing, as the case may be).

Far more people wrote to me regarding version 1.0 than I ever expected. I thank you all for your support and your suggestions.

Cryptogrammer was developed using Symantec Think C version 6.0.1. Portions copyright ©1993 Symantec Corporation.