Typing Tutor II
for the Apple® II

Created by The Image Producers, Inc.
Produced by Microsoft Corporation
Typing Tutor II

Introduction

Whether you are a student, a businessperson, or a super-secretary, Typing Tutor II can be an invaluable aid for learning or increasing your typing or word processing skills. Typing Tutor II provides a combination of lessons, practice paragraphs, and tests so you can learn new keys, practice those you already know, and test your progress. In addition, in Teacher Mode, Typing Tutor II can monitor the typing progress of up to 49 individuals, making it an ideal teaching tool.

Typing Tutor II provides a highly individualized approach to teaching—each drill is created to meet your specific requirements. Typing Tutor II’s proprietary Time Response Monitoring™ software monitors the keyboard one hundred times per second. TRM™ is so responsive it detects even the slightest pause that occurs when you remove your eyes from the screen to look at the keys. Even as you type, Typing Tutor II incorporates this information into your lesson, drilling you most on your weakest characters.

Your Apple® II or Apple II Plus computer is a natural teacher and Typing Tutor II takes full advantage of its capabilities. The tools required to use Typing Tutor II, the typewriter style keyboard and CRT screen, are already available on your Apple computer. In addition, the timing and memory capabilities of your computer are ideal for measuring and recording speed and accuracy levels. Typing Tutor II brings it all together.

The Authors

Typing Tutor II was designed by Dick Ainsworth and Al Baker, and coded by Roy B. Giampoli and Todd Krein, all of The Image Producers, Inc., Northbrook, IL. The Image Producers bring unique creative talents in human communications, education, and programming to the personal computer market.
The Right Hardware

To use Typing Tutor II, you will need an Apple II or Apple II Plus computer with Applesoft® in ROM and 48K memory, a disk drive, DOS 3.3, and a program disk.

A printer compatible with your Apple II allows you to obtain printed copies of paragraphs. The printer interface card should be inserted in slot 1. Refer to the manual which accompanied your interface card for instructions on proper installation.

How to Backup Your Typing Tutor II Disk

No matter how careful you are, disks may become damaged and the programs on them ruined. Thus, we recommend that you immediately make a backup copy of your Typing Tutor II disk. This copy should be used for your personal backup purposes only. Any other use of the extra copy violates copyright laws.

To make a backup copy of the Typing Tutor II program, you will need a blank disk and the Apple DOS 3.3 system master. For complete instructions on making a backup, refer to pages 38-40 of the Apple II Disk Operating System Instructional and Reference Manual (3.3). After you have successfully obtained a correct copy, label it with the name of the program and copyright, and entitle it BACKUP. Then, use the backup and store the original where it cannot be damaged.

How to Load Typing Tutor II

To load the Typing Tutor II program into your computer, proceed as follows:

1. Hold the disk on the end with the label attached to it, label facing up. (If you have placed a write-protect tab over the disk notch, remove it before loading.) Insert the disk into the drive (Drive 1, if you have more than one drive).

2. Turn on your computer and video monitor.

3. The program will boot automatically. However, this may take some time, so be patient. When the program has completely loaded, the following will appear on the screen.

...Typing Tutor II...

1. NEW USER
   SELECT (1-1)

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You are now ready to begin your typing lesson.

The Preliminaries

Before you actually begin to learn to type, there are a few characteristics unique to typing on a computer that you should take into consideration.

As you look at your keyboard, you will notice several characters not found on the standard typewriter keyboard. These special characters are available on a variety of word processing systems; therefore they are included in your lessons.

The symbols (=, +, -, etc.) are located in different places on different keyboards. The locations vary from computer keyboard to computer keyboard and from typewriter to typewriter. Every time you use a different type of keyboard, you will need to familiarize yourself with the symbol locations.

Typists who use a typewriter keyboard often use a lowercase L (l) as the numeral 1 and the capital letter O as the numeral 0. This substitution is not allowed by the Apple computer. Unlike many conventional typewriters, the computer has a separate key for each numeral from zero (0) through nine (9).

Since you will be typing from material that is printed on your monitor, it is important that you be able to see the letters clearly. Make sure there is no glare from lights, windows, etc. on the face of the monitor. Also make sure the computer is at a comfortable height. Desk height or slightly lower will probably be most comfortable.
The standard typing position is:

Back straight against the back of your chair.
Feet firmly on the floor, one just ahead of the other.
Fingers curved and upright over the home row keys. (See diagram on page 7).
Wrists low and relaxed.
Elbows near your body, with forearms perpendicular to the keyboard.

Getting Started

After you have loaded Typing Tutor II, the screen will display the following menu:

1. NEW USER
   SELECT (1-1)
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Typing Tutor II can record the progress of as many as 49 students. The first time you record your progress, you will be asked to enter your name. Doing so will include you in the student directory. If you do not record your progress, the computer will not document your activities. You will then have to begin your next lesson as a new user.

If you are not a new user, or if other students have already used the Typing Tutor II program and recorded their progress on the disk, an alphabetical listing of all students will appear on the initial menu.

...Typing Tutor II...

1. NEW USER
2. CHRIS
3. JOE
4. JOHN
5. JUDY
6. LAURA
7. MARY
8. MIKE
9. SUE

SELECT (1-9, →)

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If you have previously used the program and recorded your progress, press the number preceding your name. (If the listing exceeds a single screen, the arrow keys can be used to scroll onto additional screens.)

If you are a new user, you will be presented with the following menu:

1. LETTERS
2. NUMBERS
3. SYMBOLS
4. TYPING TEST

SELECT (1-4)

Your selection will determine your starting level. All subsequent drills are adjusted according to the skill you demonstrate.

Note

You will only see this menu the first time you begin the Typing Tutor II program (unless you fail to record your progress, in which case you will be treated as a new user). The next time you begin the program, you will automatically go to the next menu (see below) after you have selected your name.

Press the appropriate number to select the level you wish to begin with. Option (1) Letters consists of only alphabetic characters. However, (2) Numbers includes both letters and numbers and, likewise, (3) Symbols includes letters, numbers, and symbols. We suggest that beginning typists start with a drill of letters. However, if you are an experienced typist, you can choose to begin with numbers, symbols, or a typing test.

After you have selected the type of character you wish to learn or practice, you will see this menu:

1. LEARN KEYS
2. PRACTICE PARAGRAPH
3. TYPING TEST

SELECT (1-3)
(1) Learn Keys is the instructional part of the program designed to teach you new keys. It is a series of lessons that are continuously adjusted by the computer to help you learn the keys you don’t know. The program automatically inserts new letters as you gain speed and accuracy. Characters you hesitate upon reappear until you demonstrate proficiency at typing them.

(2) Practice Paragraph generates a series of words to allow you to type longer passages. When you complete the practice paragraph, Typing Tutor II evaluates your skill. Selecting a practice paragraph at this point generates a series of words consisting of all the keyboard characters.

(3) Typing Test generates a paragraph designed to test your progress. Three test paragraphs have already been created and are contained on the disk. These can be edited, if you so desire. Additional tests can also be created. (See page 14, Edit Paragraph, for details on creating and editing test paragraphs.) After typing the paragraph, you will receive a detailed analysis of your progress.

Note that your selections from the first two menus are combined to create the appropriate drill/test. For example, selecting (3) Symbols with (2) Practice Paragraph generates a paragraph formed randomly from all possible characters. Subsequent drills are created with the results of this initial exercise in mind.

Begin by selecting (1) Learn Keys. The following will appear on the screen:

FAST LESSON KEYS SLOW
\^//@ + >< * = ? ! &
% ) (# $ : -6
FDSA 501928374/
Z.X.CNBNVMY
THGPQOWURI
ASDF FSDA
E;LKJ

The letters listed under LESSON KEYS are those you will practice typing. The dash positioned under the first letter is the cursor. It indicates the character you should type and moves from character to character as you practice the drills.

The SHIFT Key

The lessons and paragraph drills for learning numbers and symbols function just as those for learning letters, with one exception: To type some of the symbols, you must use the SHIFT key.

To determine which symbols require use of the SHIFT key, look at the keyboard. On some keys you will note more than one character. Typing the upper character requires use of the SHIFT key, typing the lower character does not.

There are two SHIFT keys, located at the lower right and left corners of the keyboard. Both serve the same purpose. When you wish to type a symbol that requires use of the SHIFT key, press the SHIFT key with the little finger of the hand you won’t be using to type the symbol. Simultaneously press the desired character with the appropriate finger. Release both at once and continue typing. Repeat this process each time a shift-key character is required.

Typing Your First Lesson

Your first four LESSON KEYS are A, S, D, and F. Place the fingers of your left hand lightly on these four keys. They comprise the left half of the ‘home row.’ The fingers of your left hand will use these keys as a base as you type. The home keys for your right hand are J, K, L, and ;.

![Figure 1. Keyboard](image-url)
Before you start typing, memorize the location of the A, S, D, and F keys. It is essential that you do not remove your eyes from the screen or look at the keys as you type. To attain maximum speed it is very important that you learn to type by touch.

Look at the two groups of four letters in the middle of the screen. Type the first four letters as they are indicated, keeping your eyes on the screen. Press the space bar with either thumb to move one space to the right. Now type the last four letters.

At the end of each line, press the RETURN key with the little finger of your right hand. Do this without moving your hands or lifting your fingers off the home keys. It may feel awkward at first, but it is important that you learn to press the RETURN key without moving your fingers away from the home keys. That way, you don’t have to replace your hands on the home row every time you end a line.

The Time Response Monitoring system monitors your activities from the moment you type your first character. TRM checks your typing 100 times per second. When your reaction time on any letter is equivalent to approximately 30 words per minute, that letter is added to the FAST list and a new key is selected for drill. TRM continues to check your progress until you press RETURN at the end of a drill. At this point, the computer displays the number of errors you have made, as well as your current typing rate measured in words per minute.

If you wish, you can begin with a slower typing rate by pressing the ESC key (assuming you have already selected a lesson option) and then selecting option (2) Learn More Keys from the series of options that are displayed. You can also adjust the rate in the middle of a drill, practice paragraph, or typing test, or at the end of every ten drills (see Your Options, page 9).

Your first lessons will include only the home keys, which you type with the appropriate fingers according to the diagram on page 7. As you learn where the home keys are, new keys are introduced.

Each time a non-home key is added, it is introduced in conjunction with a key that is typed with the same finger. For example, the E key is introduced in a drill with the home key D.

DEDE DEDE

You should type E with the same finger you use to type D—the middle finger of your left hand.

Non-home keys are typed by extending the appropriate typing finger only. Do not move your other fingers off the home row. By keeping most of your fingers on the home keys at any one time, you will develop a reference for locating all of the keys by touch. Return to the home key after each keystroke, even though it may feel awkward at first. Any error you make will be marked with a caret (\). Refer to the diagram on page 7 if you cannot remember the location of a key.

After you have typed the sequence of ten drills, the following menu will appear at the bottom of the screen:

1. CONTINUE DRILL
2. LEARN MORE KEYS
3. BUILD MORE SPEED
4. PRACTICE PARAGRAPH
5. PROGRESS REPORT

SELECT (1-5)

These menu options are explained in the following section.

Note

If at any time during a lesson you wish to interrupt a drill, press the ESC key (located in the upper left corner of the keyboard) one or more times with the little finger of your left hand. The computer will return to the selection menus, and finally, to the opening frame.

Your Options

After you have typed ten drills, you can choose to test your skills with a practice paragraph, check your progress, or continue your drill. If you choose to continue the drill, you have the additional option of adjusting the program to suit your personal requirements.
You can also select from among these options before you type the first character in a lesson (or at any other point within a lesson, practice paragraph, or test paragraph). To do so, press ESC. The options (1-5) will appear at the bottom of the screen. Select the appropriate option (descriptions follow).

Continue Drill

Press (1) to repeat your typing lesson. New characters replace any letters which were promoted to the FAST column in your lesson. If no letters were moved to the FAST column, the original keys remain in the LESSON KEYS column. Note that it is not necessary to perfect your knowledge of the characters in a lesson before proceeding to other keys or to a practice paragraph.

Learn More Keys

As you already know, selecting (2) Learn More Keys allows you to reduce the required typing rate. When you select (2), the Learn Keys drill automatically appears on the screen. If you simply wish to practice individual characters at the reduced rate, you can proceed with the drill.

If you would rather type a practice paragraph or take a typing test (at the adjusted rate), press ESC and select the appropriate option from the menu. In either case, you will now be measured against a reduced word per minute standard. Each time you select Learn More Keys you reduce the typing rate approximately ten percent.

Altering the typing rate affects the way TRM monitors your response time. In Learn Keys lessons, the slower response time required lets letters enter the FAST category more easily and introduces more new characters from the SLOW category to replace them. You may find that a character shifts between the FAST and SLOW categories in both lessons and practice paragraphs if you do not match the TRM response time.

Build More Speed

Choosing (3) Build More Speed, like choosing (2) Learn More Keys, alters the typing rate against which you are monitored.

But, the required typing rate is increased by ten percent, to allow you to build speed. The faster response required on each character before it is moved to the FAST category allows you additional practice on each key.

Note

The Typing Test is used to check your overall speed and the TRM rate is only used to determine those keys which you type most slowly during the course of the test.

Practice Paragraph

To practice the keys you have just learned, press (4) Practice Paragraph. Five lines of words that include only the letters you have learned thus far will be generated.

After the paragraph has been generated,

** BEGIN **

will appear on the screen to indicate that you may begin typing. Concentrate on typing the character above the cursor. As you type, your letters will appear on the screen under the computer-generated letters. Your typing should match the computer-generated paragraph above it. Press the space bar between each word and RETURN at the end of each line.

If you have made a spacing error and your letters aren't directly underneath the corresponding program letters, each stroke will be counted as an error. If this occurs, adjust your typing to match the letter directly above the cursor. When you have finished typing the paragraph, press RETURN.

Typing Tutor II will analyze your progress. It will tell you the number of errors you made, the keys on which those errors were made, the keys which you typed most slowly, your accuracy rate, and your speed, measured in words per minute.

TRM monitors your skill during the practice paragraph the same way it does during a key-learning drill. Characters shift between
the FAST and SLOW categories depending on how fast you respond to them.

Therefore, your performance on a character in a lesson affects the status of that character in a practice paragraph and vice versa. Only when you consistently type a character at an acceptable speed (in all lessons and practice paragraphs) will it remain in the FAST category.

**Progress Report**

For a detailed analysis of your progress, press (5) Progress Report. The report lists the keys you learned during the lesson, average number of words typed, average number of errors made, highest typing rate attained, and the number of drills and paragraphs completed. In addition, if you have taken a typing test in this session, your latest score will be shown.

You will then see this menu:

1. RETURN TO LESSON
2. RECORD PROGRESS
3. RESTART PROGRAM

SELECT (1-3)

To continue with the current drill, press (1). To record your progress, press (2). (After your progress has been recorded, you will automatically return to the opening frame.) To restart the program without returning to the lesson or recording your progress, press (3).

**Teacher Mode**

In Teacher Mode the progress of up to 49 students can be recorded or reviewed; new test paragraphs can be written, edited, and assigned; and, if a printer is available, test paragraphs can be printed out on paper.

To enter Teacher Mode, select 0 at the opening menu. Respond to the password prompt by typing PASSWORD and pressing RETURN. To protect your files from disclosure to unauthorized persons, the password is not displayed on the screen as you enter it. (For instructions on changing the password, see page 14.)

The following menu will appear:

```plaintext
   ... TYPING TUTOR II ...
1. STUDENT RECORDS
2. SELECT NEW TEST PARAGRAPH
3. EDIT PARAGRAPH
4. CHANGE PASSWORD
5. DELETE STUDENT
6. PRINT PARAGRAPH

   SELECT (1-6)
```

Each option is explained in the following paragraphs.

**Student Records**

To review students’ records, select (1) Student Records. The names of all the students whose records have been recorded will appear. Enter the number preceding the name of the student whose record you wish to review (use the arrow keys to move through the list of names). The record for that student will be displayed on the screen. When you have completed your review of that individual’s progress, press ESC one to return to the Student Records menu; press ESC again to return to Teacher Mode. Press ESC yet again to return to the opening frame.

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**Note**

You may press ESC at any time during your exercises in Teacher Mode to stop the current activity. The preceding menu will be displayed. Pressing ESC a second time will display either the Teacher Mode menu or the opening frame, depending upon where you are in the program.

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**Select New Test Paragraph**

To change the test paragraph that will be presented when a student selects a typing test, press (2) Select New Test Paragraph. When the list of all available test paragraphs is displayed, choose the one you wish to administer during the next testing period.
Edit Paragraph

To create or edit test paragraphs, press (3) Edit Paragraph. Three test paragraphs are already included in the Typing Tutor II program. These can be edited as necessary. In addition, you can create test paragraphs tailored to your own needs. These, too, can be edited.

You will be asked to enter a title for each test paragraph you create. The title can be as many as twenty characters long. After you have entered the title, press RETURN. The editing screen will then appear. To create a new test paragraph, use the editor (see page 15 for instructions). When you are done creating or editing the test paragraph, save it (with CTRL Q). You will automatically be returned to the Teacher Mode menu.

Change Password

The password provided with Typing Tutor II is PASSWORD. You can change this password by selecting (4) Change Password. Simply enter the new word and press RETURN. By personalizing the password, you can limit access to the Teacher mode to authorized individuals.

Be sure to record your new password. Should you fail to do so and then forget the word, you will lose all Teacher mode functions.

Delete Student

To delete a student's records, select (5) Delete Student. Type in the name of the student, as requested. The name you enter must be identical to the one listed in the student directory, or a STUDENT NOT FOUND error will occur. (See “Error Messages,” page 16). As soon as you press RETURN, the records for that student will be deleted.

Print Paragraph

To print out a paragraph on your printer, select (6) Print Paragraph. Then select the paragraph you wish to print and the number of copies to be printed. Make certain that the printer interface has been connected through slot 1 and that the printer has been turned on. (Consult the manual which accompanied your interface card for details on proper installation.)

Line Editor

The following commands can be used to edit text as it appears on the screen. Note, however, that line editor commands can be used only in Teacher Mode or when you enter your name to record your progress.

Refer to Figure 2 to study the logical relationship between the first five commands.

![Line Editor Command Keys](image)

Figure 2. Line Editor Command Keys

The D key is used as a central reference key. To move left, right, up, and down, simultaneously press the CTRL key and the key that is to the left, or right, or top, or bottom of the D key.

For example, the A key is located to the left of the D key. By pressing the CTRL and A keys simultaneously, you will move the cursor flush left. Likewise, a similar action involving the G key, which is located to the right of the D key, moves the cursor flush right. Both the CTRL C and CTRL E editing commands bear out this logical relationship.
Table 1. Line Editor Commands

<table>
<thead>
<tr>
<th>Command</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTRL A</td>
<td>Returns cursor to the left margin.</td>
</tr>
<tr>
<td>CTRL C</td>
<td>Moves cursor down one line.</td>
</tr>
<tr>
<td>CTRL D</td>
<td>Moves cursor alternately to the top or bottom left corner of text.</td>
</tr>
<tr>
<td>CTRL E</td>
<td>Moves cursor up one line.</td>
</tr>
<tr>
<td>CTRL G</td>
<td>Returns cursor to the right margin.</td>
</tr>
<tr>
<td>CTRL J</td>
<td>Deletes characters.</td>
</tr>
<tr>
<td>CTRL I</td>
<td>Inserts characters.</td>
</tr>
<tr>
<td>CTRL Q</td>
<td>Saves editing changes on disk.</td>
</tr>
<tr>
<td>ARROW KEYS</td>
<td>Move cursor left or right.</td>
</tr>
</tbody>
</table>

Error Messages

The following error messages can occur during operation of Typing Tutor II.

Maximum Student Limit Reached
*** Please Inform Instructor ***

Typing Tutor II can record a maximum of 49 student records. When the limit has been reached, each successive request to record the progress of a new student results in this warning. Current users, however, will still be able to record their progress.

Though new students will not be able to record their progress on the disk, they can proceed with the drills. If a new user attempts to record information, the error message

```
MAXIMUM STUDENT LIMIT REACHED
RESULTS WILL NOT BE RECORDED
*** PLEASE INFORM INSTRUCTOR ***
```

will appear, and a record will not be made.

Typing Test Is Not Available

This error message indicates that the test paragraph selected is not available. To correct this situation, select either (3) Edit Paragraph or (2) Select New Test Paragraph at Teacher Mode, and create an appropriate paragraph or assign another.

Student Not Found

This message indicates that a student’s name has been deleted or has not been recorded.

Printer Is Not Connected.
Press Any Key To Continue.

If a printer is to be used, the printer interface card must be inserted in slot 1. If it is not, or if it is not connected correctly, the above message will appear. Refer to the manual which accompanied your interface card for instructions on proper installation.