

# DTSS Commands

The *Original -Original* Version

## Commands

HELLO      Start a new session, enter your user number

The simulator at present makes no distinction about user numbers, and thus ignores this command.

NEW          Start a new program

OLD          Retrieve a program from storage

This command corresponds to the OPEN command on most modern applications.

SAVE        Save the current program to storage

This command saves the current program, provided there is no saved file with the same name. The purpose of this restriction was to make sure you didn't accidentally overwrite a valuable program.

REPLACE    Save the current program to storage, overwriting older version

This command overwrites an already-saved program with the same name. (Most modern applications ask the user if she wants to overwrite a saved program.)

RENAME    Rename the current program

CAT        List the names of your saved programs (short for CATALOG)

LIST       List the current program

RUN        Run the current program

TEST       Test a student program using the TEACH system

See the explanation of the TEACH system later in this manual.

STOP       Stop the current run of the program (in case an infinite loop)

UNSAVE    Unsave the current program program

SYSTEM    Name the system -- limited to either BASIC (default) or ALGOL

BYE        End the session

GOODBYE   Same as BYE

All commands may be abbreviated to the first three letters.

The NEW, OLD, and RENAME commands may be followed by a program name. If not,

the operating system will ask you for the name of the program. The SYSTEM command may be followed by either BASIC or ALGOL. If not, the operating system will ask you for a system name. (Like the commands, the system names may be abbreviated to three letters.)

In addition, the SPEED command allows you to specify the teletype speed, for a more realistic simulation. Thus, SPEED 10 will slow things down to about 10 characters per second.

## **Program Library**

Programs of common interest can be found in the program library. All such programs have the sequence “\*\*\*” appended to the end of their names.

For instance, to generate a mortgage table, use

```
OLD MORT***
```

Make whatever changes you need to reflect your personal mortgage and run it.

To find out what programs are in the program library, use

```
OLD LIBCAT***  
LIST
```

## **Test Programs**

Several short programs to test features of BASIC (and of Algol) are in your space. Use

```
OLD MYCAT  
LIST
```

to find out what they do.

## **The TEACH System**

The TEACH system was devised to test a program prepared by a student in one of the introductory courses. When the student felt he had a good program, he typed

```
TEST
```

The TEACH test program corresponding to his program was then invoked. It checked the student's program for various DATA values. If all worked okay, it sent a congratulatory message to the student and instructions for turning in the program for credit. If the student's program did not work correctly in all cases, the TEACH test program attempt to deduce the student's error from the incorrect answer, and sent a message suggesting how to repair the program.

The student was required to use certain variable names in certain ways. The TEACH test program then examined the values in these variables.

At present there is a test program only for the programming assignment PIE. A correct sample solution is the library program PIE\*\*\*. To see how things work, use

```
OLD PIE***  
REN PIE  
TEST
```

Then, try making one or more programming mistakes (i.e., using different variable names, not iterating the correct number of times, etc.) and see what TEACH tells you.

(You need to RENAME the program to omit the “\*\*\*”, just as if you had written it yourself instead of downloading it from the library.)

### **Algol Programs**

There are programs written in Algol in both the Library (\*\*\*) and your own space. To run any of these programs, use

SYSTEM ALGOL

Otherwise, DTSS will attempt to run them in BASIC, producing nothing but error messages.

A brief description of Algol can be found in the pdf document

**An Algol Outline.pdf**

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