

Saving and Loading Under Operating Systems

This section describes a simple way to use XYBASIC's ROMSquared features to save and load XYBASIC user programs as files under operating systems other than CP/M and ISIS-II. The method used is a CALL from XYBASIC of an assembly language routine which first obtains parameters from XYBASIC and then executes the appropriate system-specific file manipulation routine.

For purposes of illustration we assume that XYBASIC starts at location 100H, that the assembly language saving and loading routines begin at 0A000H and 0A800H, and that memory above 0B000H can be used as a scratch RAM area during program loading.

We also assume that the system-dependent routine DSAVE is passed the following information:

A	number of characters in filename
BC	location of first filename character
DE	location of first byte to save
HL	location of last byte to save

Similarly, we assume that the system-dependent routine DLOAD is passed the following:

A	number of characters in filename
BC	location of first filename character
DE	location of first byte of scratch area

The XYBASIC commands to save a program are:

```
F% = FIRST          'FIRST LOCATION
L% = LAST           'LAST LOCATION
F$ = "FILENAME"     'DESIRED FILENAME
CALL #A000, F%, L%, F$ 'SAVE IT
```

and the assembly language save routine at location 0A000H is:

```
GTPAR EQU 103H          ;entry point of routine GTPAR
ORG 0A000H
CALL GTPAR             ;get first location address
MOV E,M
INX H
MOV D,M
PUSH D                 ;save first location
CALL GTPAR             ;get last location address
MOV E,M
INX H
MOV D,M
PUSH D                 ;save last location
CALL GTPAR             ;get filename address
MOV A,M                ;length to A
INX H
MOV C,M
INX H
MOV B,M                ;first filename char loc to BC
POP H                  ;last location to HL
POP D                  ;first location to DE
DSAVE: [System-dependent saving routine]
RET
```