

**NAME**

HSH2HB – Expand the hash of a Hebrew text string into LaTeX for typesetting the string.

**SYNOPSIS**

**CALL HSH2HB(MXHASH,CHASH,VHASH,MXHSTR, LHSTR,HSTR,RC)**

|               |  |
|---------------|--|
| MXHASH        | is the INTEGER*4 dimensioned length of CHASH and VHASH |
| CHASH(MXHASH) | is the INTEGER*1 vector of letter numbers              |
| VHASH(MXHASH) | is the INTEGER*1 vector of vowel numbers               |
| MXHSTR        | is the INTEGER*4 dimensioned length of HSTR            |
| LHSTR         | is the INTEGER*4 number of ASCII characters in HSTR    |
| HSTR(MXHSTR)  | is the CHARACTER*1 LaTeX string returned               |
| RC            | is the INTEGER*4 return code; see below                |

**WARNING**

This routine copies bytes into HSTR without checking for an overflow of its dimension, so if the string is too short a subscript out of range error will occur. To guard against this eventuality would greatly complicate the code and significantly impact its performance.

**DESCRIPTION**

For each pair  $i$  of (consonant,vowel) codes (CHASH( $i$ ),VHASH( $i$ )) this routine generates a LaTeX command to typeset the corresponding Hebrew letter.

**SEE ALSO**

HB2HSH hashes a LaTeX string for setting Hebrew into codes representing the Hebrew letters.

**DIAGNOSTICS**

These are the values of RC that can be returned.

|   |  |
|---|--|
| 0 | all went well  |
| m | the $m$ 'th character hash contains an illegal consonant/vowel trope number, or trope coordinate |

**NOTES**

The document "Homebrew Hebrew" describes Hebrew typesetting.

**LINKAGE**

gfortran source.f -L\${HOME}/lib -lmisc

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**EXAMPLE**

```
CHARACTER*1 HSTR(20)
INTEGER*1 CHASH/32/,VHASH/6/
INTEGER*4 RC
CALL HSH2HB(1,CHASH,VHASH,20, LHSTR,HSTR,RC)
PRINT *, (HSTR(K),K=1,LHSTR),RC
STOP
END
```

This example produced the following output:

```
unix[1] a.out
\patach{resh}          0
unix[2]
```

The letter number 32 corresponds to a resh and the vowel number 6 corresponds to a patach. The return code 0 shows that the translation was successful.