

## WANG SYSTEM 2200 STRING VARIABLE NOTES

THE FOLLOWING RULES REGARDING STRING VARIABLE USE IN LET STATEMENTS MAY NOT BE CLEAR FROM THE EXISTING 2200 LITERATURE.

### RULES FOR STRING VARIABLES IN LET STATEMENTS:

( LET 'RECEIVER' = 'VALUE' )

1. IF RECEIVER IS A STRING VARIABLE AND VALUE IS SHORTER THAN THE LENGTH OF RECEIVER, THE RECEIVER IS ALWAYS PADDED WITH TRAILING SPACES ( HEX(20)'S ).

```
EX.      :10 A$="ABCDE": B$="1"
          :20 A$=B$
          :30 PRINT "A$="; A$
          :RUN
          A$=1
```

2. IF RECEIVER IS A STR FUNCTION AND VALUE IS SHORTER THAN THE LENGTH OF THE RECEIVER, THE RECEIVER IS NOT PADDED WITH TRAILING SPACES.

```
EX.      :10 A$="ABCDE": B$="1"
          :20 STR(A$, 2, 3)=B$
          :30 PRINT "A$="; A$
          :RUN
          A$=A1CDE
          (NOT 'A1 DE' AS MIGHT BE EXPECTED)
```

3. IF THE VALUE IS A STR FUNCTION, THE SPECIFIED CHARACTERS ARE ALWAYS TRANSFERRED TO THE RECEIVER EVEN IF THEY ARE TRAILING SPACES.

```
EX.      :10 A$="ABCDE": B$="1"
          :20 STR(A$, 2, 3)=STR(B$, 1, 3)
          :30 PRINT "A$="; A$
          :RUN
          A$=A1 DE
```

CONSIDERING THE ABOVE RULES, CARE MUST BE TAKEN WHEN DEALING WITH PACKED DECIMAL NUMBERS STORED IN STRING VARIABLES SINCE NUMBERS ENDING IN 20 (2020, 202020, ETC.) ARE INTERPRETED AS VALUES WITH TRAILING SPACES.

```
EX.      :10 REM THIS PROGRAM CONVERTS X TO PACKED
          :      DECIMAL AND STORES RESULT IN A$ STARTING AT
          :      THE 4TH CHARACTER.
          :20 DIM A$8, B$2
          :30 INIT(FF)A$
          :40 INPUT "X", X
          :50 PACK(####) B$ FROM X
          :60 STR(A$, 4, 2)=B$
          :70 HEXPRINT A$
          :80 GOTO 30
          :RUN
          X? 1234
          FFFFFFF1234FFFFFF      (O. K. )
          X? 1720
          FFFFFFF17FFFFFFF      (INCORRECT)
```

TO INSURE THAT NUMBERS ENDING IN 20 ARE PROPERLY TRANSFERRED, LINE 60 SHOULD BE:

```
:60 STR(A$, 4, 2)=STR(B$, 1, 2)
:RUN
X? 1720
FFFFFFF1720FFFFFF
```