```
NUMBER? 1025
REP OF 1025 IS 0  0  0  0  0  1  0  0  0  0  0  0  0  0  0  1
BCD OF 1025 IS 0  0  0  1  0  0  0  0  0  0  1  0  0  1  0  1
BIN OF 1025 IS 0  0  0  0  0  0  0  1  1  0  0  1  0  0  0  1
NUMBER? 950
REP OF 950 IS 0  0  0  0  0  0  1  1  1  0  1  1  0  1  1  0
BCD OF 950 IS 0  0  0  0  1  0  0  1  0  1  0  1  0  0  0  0
BIN OF 950 IS

FC ERROR: 90  TEMP = BIN(NUM)

OK
```

If the argument to BIN is not a legal BCD number (i.e. one of its 4-bit components is not a legal decimal digit), an FC (Function Call) error will occur. Similarly, if the argument to BIN is not convertible to a legal 4-digit BCD number (i.e. its value is less than 0 or greater than 9999), an FC error will occur.

## HEX$, OCT$ and BIN$

The Extended XYBASIC functions HEX$, OCT$ and BIN$ convert integers to hexadecimal, octal and binary representations.

Each of the conversion functions HEX$, OCT$ and BIN$ takes an integer argument and returns a string containing the hexadecimal, octal or binary representation of the argument's value. The following sample program demonstrates the use of these functions.

```
NEW
OK
10 INPUT NUMBER
20 PRINT "THE DECIMAL NUMBER" NUMBER "IS:";
30 PRINT TAB(30); HEX$(NUMBER), "IN HEX,"
40 PRINT TAB(30); OCT$(NUMBER), "IN OCTAL, AND"
50 PRINT TAB(30); BIN$(NUMBER), "IN BINARY."
60 GOTO 10
RUN
? 170
THE DECIMAL NUMBER 170 IS:      AA          IN HEX,
                                252         IN OCTAL, AND
                                10101010    IN BINARY.
? 512
THE DECIMAL NUMBER 512 IS:      200         IN HEX,
                                1000        IN OCTAL, AND
                                1000000000  IN BINARY.
? ^C
BREAK AT LINE 10
OK
```

Since each conversion function returns a string value, the converted result may be manipulated as desired with other string functions.