WindowAttrScrollUp

BLAttrWindowScrollUp.bas

This subroutine specified rectangle of screen and scrolls up just the colour attributes up by a character. You might be able to use it for games (though there are probably faster scrolly routines for that); but the aim here is to be able to scroll up part of the screen, so that you can split between text on a rectangle area and other information elsewhere - e.g. graphic adventures. This then is an addendum for windowScrollUP.bas, and can be called with it - probably less useful in its own right. Note that it leaves the last line attributes untouched - it can't know inherently what colour to paint this section.

```
SUB BLAttrWindowScrollUp (X AS UBYTE, Y AS UBYTE, Width AS UBYTE, Height AS UBYTE)
REM Routine, acting as a pair to BLWindowScrollUp.bas that moves the attributes up - and leaves the la
ASM
     LD H,58h  ; $5800 = 22528 = Attr start
     LD L,(IX+5) ; HL now contains correct column, but top row.

     LD A,(IX+7) ; Y
     CP 8
     JR C, BLAttrWindowScrollUpGotRightThird
     INC H
     CP 16
     JR C, BLAttrWindowScrollUpGotRightThird
     INC H
     BLAttrWindowScrollUpGotRightThird:
     AND 7
     RRCA
     RRCA
     RRCA  ; Three right rotates - same as 5 left rotates = A=A*32
     ADD A,L
     LD L,A ; HL now points to correct row, top left corner.

     LD D,H
     LD E,L ; Copy HL to DE

     LD BC,32
     ADD HL,BC ; Point HL at one row down.
     LD C,(IX+9) ; width
     LD B,(IX+11) ; Height
     DEC B ; (We don't scroll past the end)

     BLAttrWindowScrollUpHeightLoop:
     PUSH BC ; Save our width and height
     PUSH HL
     LD B,0

     BLAttrWindowScrollUpWidthLoop:
     LDIR ; A one instruction width loop :P

     POP DE ; Last run's source is now our destination
     LD H,D
     LD L,E ; Copy into HL
     LD BC,32
     ADD HL,BC ; Move HL down one row


     POP BC ; get our counters back
     DJNZ BLAttrWindowScrollUpHeightLoop ; Dec height, and if we haven't run out of rows, go do another
END ASM
END SUB
```

Usage

```
BLAttrWindowScrollUp(TopLeftXCoordinate, TopLeftYCoordinate, WidthInCharacters, HeightInCharacters)
```

The parameters are the X,Y print coordinates of the Top Left corner, width in characters, and
height in characters.

Example of use:

```
REM Put something on screen:

FOR n=1 to 12
PRINT INK RND *7; PAPER RND * 7; "012345678901234567890123456789 01";
PRINT INK RND *7; PAPER RND * 7; "0ABCDEFGHI0KLMNOPQRS0UVWXYZABC0D";
NEXT n

REM Scroll it slowly:
FOR n=1 TO 10
BLAttrWindowScrollUp (3,3,8,15)
BLAttrWindowScrollUp (28,10,3,8)
PAUSE 100
NEXT n
```