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All\_Possible\_Colors, Version 1 (Colors.asm)

This program uses a nested loop to display all the possible foreground colors and background colors in the Irvine32 library. First the counter holds the number sixteen which is the total number of colors in the Irvine32 library and the background register EDX is initialized to 0. After entering the first loop the foreground register EBX is first initialized to 0. Next the current counter for the outer loop is pushed to the stack. Then the counter is reset to sixteen for the inner loop. In the inner loop the background is set to be outputted in the EAX register. Then multiply16 was called to shift the bits of the EAX register for proper background output. The program moves the character to be displayed to the al register, writes the character, and increase the color count in the EBX register. After the inner loop ends the program increase the color count for the background in the EDX register, pops the outer loop count, and performs a carriage return and line feed for the neat display. After the outer loops ends the program restores the default console colors.