

Subtract 1 from the total.

Compute the remainder when the adjusted total is divided by 10.

Subtract the remainder from 9.

For example, consider Güllüoglu Turkish Delight Pistachio & Coconut, which has an EAN of 8691484260008. The first sum is  $6 + 1 + 8 + 2 + 0 + 0 = 17$ , and the second sum is  $8 + 9 + 4 + 4 + 6 + 0 = 31$ . Multiplying the first sum by 3 and adding the second yields 82. Subtracting 1 gives 81. The remainder upon dividing by 10 is 1. When the remainder is subtracted from 9, the result is 8, which matches the last digit of the original code. Your job is to modify the `upc.c` program of Section 4.1 so that it calculates the check digit for an EAN. The user will enter the first 12 digits of the EAN as a single number:

Enter the first 12 digits of an EAN: 869148426000

Check digit: 8