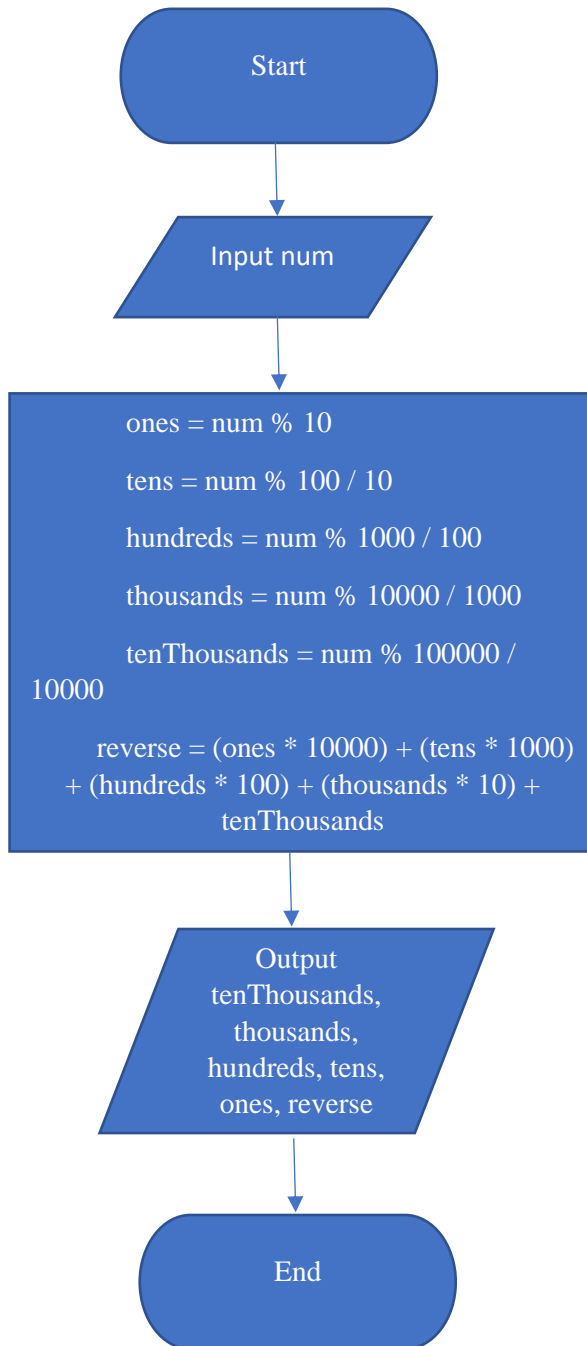


Sequential Problem

Create a flowchart and pseudocode that would input a 5-digit number and then extract its one's digit, ten's digit, hundred's digit, thousand's digit and ten thousand's digit. Output the extracted digits and output the digits in reverse order (you must use a formula / arithmetic expression in reversing the order of the 5-digit number). NOTE: Use appropriate words for your variables.



Variables used:

num, ones, tens, hundreds, thousands,
tenThousands, reverse, are numeric.

Begin:

Display “Enter a 5-digit number:”

accept num

ones = num % 10

tens = num % 100 / 10

hundreds = num % 1000 / 100

thousands = num % 10000 / 1000

tenThousands = num % 100000 / 10000

reverse = (ones * 10000) + (tens * 1000) + (hundreds * 100)
+ (thousands * 10) + tenThousands

Display “Ten Thousand’s Digit is:”, tenThousands

Display “Thousand’s Digit is:”, thousands

Display “Hundred’s Digit is:”, hundreds

Display “Ten’s Digit is:”, tens

Display “One’s Digit is:”, ones

Display “The reverse order is:”, reverse

End.

