

Which of the following regular expressions will match a string that contains exactly three consecutive digits, preceded by one or more lowercase letters, and followed by zero or more uppercase letters?

A) `r"[a-z]+\d{3}[A-Z]*"`

B) `r"[a-z]*\d{3}[A-Z]+"`

C) `r"[a-z]+\d+[A-Z]*"`

D) `r"\w+\d{3}\w*"`