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| Convert a decimal number to a Roman numeral. | |
| IPO | Python |
| Inputs: |  |
| number |  |
|  |  |
| Output: |  |
| numeral | numeral = “” |
|  |  |
| Processing |  |
| Ask for number. | number = int(input( “Give an integer: “ )) |
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|  | **# Extract the hundreds, tens & units digit** |
|  | **# from the number.** |
| Set hundreds to number / 100. | hundreds = number // 100 |
| Extract tens digit from number. | tens = number % 100 // 10 |
| Extra units digit from number. | units = number % 10 |

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| If hundreds digit is 1 Then | **if hundreds == 1:** |
| Append a “C” to numeral. | numeral += “C“ |
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| If tens digit is 1 Then | **if tens == 1:** |
| Append a “X” to numeral. | numeral += “X” |
| Else If tens digit is 2 Then | **elif tens == 2:** |
| Append an “XX” to numeral. | numeral += “XX” |
| Else If tens digit is 3 Then | **elif tens == 3:** |
| Append an “XXX” to numeral. | numeral += “XXX” |
| Else If tens digit is 4 Then | **elif tens == 4:** |
| Append an “XL” to numeral. | numeral += “XL” |
| Else If tens digit is 5 Then | **elif tens == 5:** |
| Append an “L” to numeral. | numeral += “L” |
| Else If tens digit is 6 Then | **elif tens == 6:** |
| Append an “LX” to numeral. | numeral += “LX” |
| Else If tens digit is 7 Then | **elif tens == 7:** |
| Append an “LXX” to numeral. | numeral += “LXX” |
| Else If tens digit is 8 Then | **elif tens == 8:** |
| Append an “LXXX” to numeral. | numeral += “LXXX” |
| Else If tens digit is 9 Then | **elif tens == 9:** |
| Append an “XC” to numeral. | numeral += “XC” |

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| If units digit is 1 Then | **if units == 1:** |
| Append an “I” to numeral. | numeral += “I“ |
| Else If units digit is 2 Then | **elif units == 2:** |
| Append an “II” to numeral. | numeral += “II“ |
| Else If units digit is 3 Then | **elif units == 3:** |
| Append an “III” to numeral. | numeral += “III“ |
| Else If units digit is 4 Then | **elif units == 4:** |
| Append an “IV” to numeral. | numeral += “IV“ |
| Else If units digit is 5 Then | **elif units == 5:** |
| Append a “V” to numeral. | numeral += “V“ |
| Else If units digit is 6 Then | **elif units == 6:** |
| Append an “VI” to numeral. | numeral += “VI“ |
| Else If units digit is 7 Then | **elif units == 7:** |
| Append an “VII” to numeral. | numeral += “VII“ |
| Else If units digit is 8 Then | **elif units == 8:** |
| Append an “VIII” to numeral. | numeral += “VIII“ |
| Else If units digit is 9 Then | **elif units == 9:** |
| Append an “IX” to numeral. | numeral += “IX“ |
|  |  |
| Display numeral. | print( “The number “, number, \  “ as a Roman numeral is “, numeral, \  “.“, sep = ““) |