Convert a Decimal Number to Roman Numerals

Roman numerals are a numeral system that originated in ancient Rome and remained the usual way of writing numbers throughout Europe well into the Late Middle Ages. Numbers in this system are represented by combinations of letters from the Latin alphabet. Modern style uses seven symbols, each with a fixed integer value:

Symbol	**I**	**V**	**X**	**L**	**C**	**D**	**M**
Value	1	5	10	50	100	500	1000

The following table displays how Roman numerals are usually written:

	Thousands	**Hundreds**	**Tens**	**Units**
1	M	C	X	I
2	MM	CC	XX	II
3	MMM	CCC	XXX	III
4		CD	XL	IV
5		D	L	V
6		DC	LX	VI
7		DCC	LXX	VII
8		DCCC	LXXX	VIII
9		CM	XC	IX

Here are a few example decimal numbers and their Roman numeral equivalents:

```
   3 = III
   4 = IV
   7 = VII
  10 = X
  30 = XXX
 200 = CC
 600 = DC
3000 = MMM
```

The numerals for 4 (IV) and 9 (IX) are written using “subtractive notation”, where the first symbol (I) is subtracted from the larger one (V, or X), thus avoiding the clumsier (IIII, and VIIII). Subtractive notation is also used for 40 (XL), 90 (XC), 400 (CD) and 900 (CM). These are the only subtractive forms in standard use.

A number containing two or more decimal digits is built by appending the Roman numeral equivalent for each, from highest to lowest, as in the following examples:

```
  39 = XXX + IX = XXXIX
 246 = CC + XL + VI = CCXLVI
 789 = DCC + LXXX + IX = DCCLXXXIX
2421 = MM + CD + XX + I = MMCDXXI
```

Any missing place (represented by a zero in the place-value equivalent) is omitted, as in Latin (and English) speech:

  160 = C + LX = CLX
  207 = CC + VII = CCVII
1009 = M + IX = MIX
1066 = M + LX + VI = MLXVI

The largest number that can be represented in this notation is 3999 (MMMCMXCIX).

Write a function to convert an integer decimal value to a string containing Roman numerals:

```
string decimal_to_roman(int decimal_value);
```

Files We Give You: A `makefile` and a sample main program (`dtor.cpp`) to test your solution. The executable file created by a successful build will be named `dtor`.

File You Must Submit: Place your solution code in a file named `solution.cpp`. This will be the only file that you submit.

Examples

Input: `decimal_value = 1`
Returns: a `string` object containing the string `"I"`

Input: `decimal_value = 14`
Returns: a `string` object containing the string `"XIV"`

Input: `decimal_value = 26`
Returns: a `string` object containing the string `"XXVI"`

Input: `decimal_value = 39`
Returns: a `string` object containing the string `"XXXIX"`

Input: `decimal_value = 247`
Returns: a `string` object containing the string `"CCXLVII"`

Input: `decimal_value = 789`
Returns: a `string` object containing the string `"DCCLXXXIX"`