```c
#include<stdio.h>

int main( void )
{
    int loop; /* loop counter */
    int div; /* tens digit */
    int mod; /* ones digit */

    /* display table headers */
    printf( " Roman\nNumeral\t\tDecimal\n" );

    /* loop 100 times */
    for ( loop = 1; loop <= 100; loop++ ) {
        div = loop / 10; /* separate tens digit */
        mod = loop % 10; /* separate ones digit */

        /* switch structure for tens digit */
        switch ( div ) {

            /* print appropriate Roman numeral for tens digit */
            case 0:
                break;

            case 1:
                printf( "X" );
                break; /* exit switch */

            case 2:
                printf( "XX" );
                break; /* exit switch */

            case 3:
                printf( "XXX" );
                break; /* exit switch */

            case 4:
                printf( "XL" );
                break; /* exit switch */
```

```c
        case 5:
            printf( "L" );
            break; /* exit switch */

        case 6:
            printf( "LX" );
            break; /* exit switch */

        case 7:
            printf( "LXX" );
            break; /* exit switch */

        case 8:
            printf( "LXXX" );
            break; /* exit switch */

        case 9:
            printf( "XC" );
            break; /* exit switch */

        case 10:
            printf( "C" );
            break; /* exit switch */

        default:
            break; /* exit switch */
} /* end switch */

/* switch structure for ones digit */
switch( mod ) {

    /* print appropriate Roman numeral for ones digit */
    case 0:
        printf( "\t\t%4d\n", div * 10 );
        break; /* exit switch */

    case 1:
```

```c
            printf( "I\t\t%4d\n", div * 10 + mod );
            break; /* exit switch */

    case 2:
            printf( "II\t\t%4d\n", div * 10 + mod );
            break; /* exit switch */

    case 3:
            printf( "III\t\t%4d\n", div * 10 + mod );
            break; /* exit switch */

    case 4:
            printf( "IV\t\t%4d\n", div * 10 + mod );
            break; /* exit switch */

    case 5:
            printf( "V\t\t%4d\n", div * 10 + mod );
            break; /* exit switch */

    case 6:
            printf( "VI\t\t%4d\n", div * 10 + mod );
            break; /* exit switch */

    case 7:
            printf( "VII\t\t%4d\n", div * 10 + mod );
            break; /* exit switch */

    case 8:
            printf( "VIII\t\t%4d\n", div * 10 + mod );
            break; /* exit switch */

    case 9:
            printf( "IX\t\t%4d\n", div * 10 + mod );
            break; /* exit switch */

    case 10:
            printf( "X\t\t%4d\n", div * 10 + mod );
            break; /* exit switch */
```
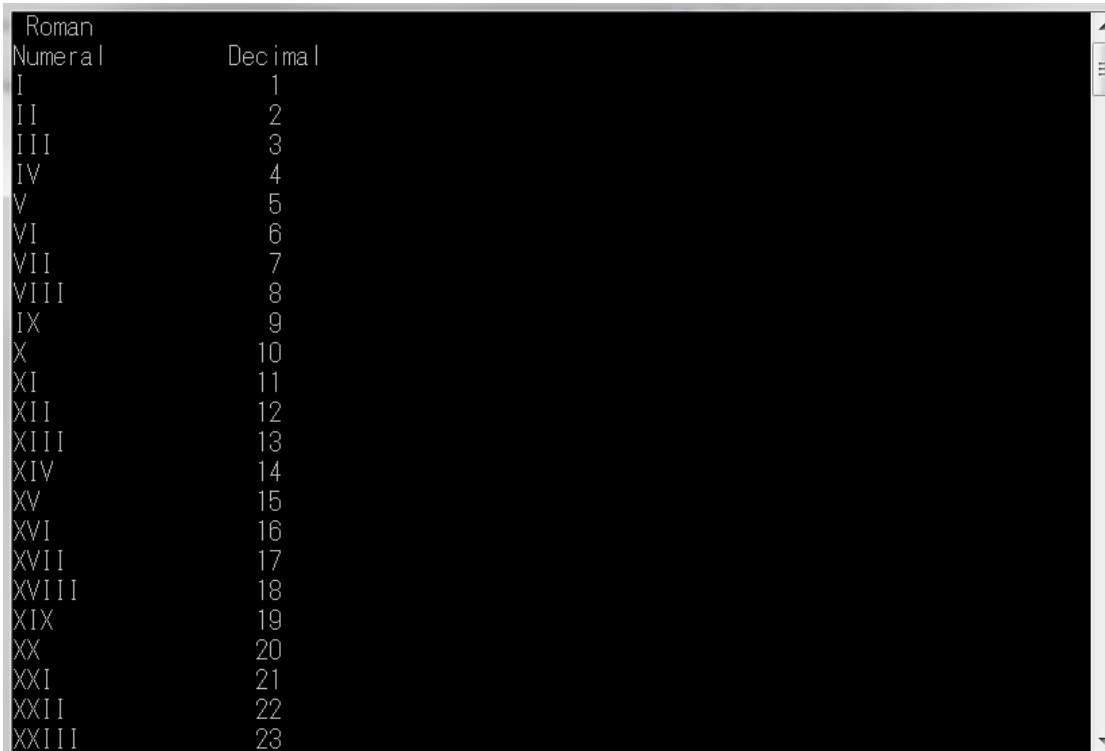
```c
            default:
                break; /* exit switch */
        } /* end switch */


    } /* end for */


    return 0; /* indicate successful termination */
} /* end main */
```

```
Roman
Numeral          Decimal
I                     1
II                    2
III                   3
IV                    4
V                     5
VI                    6
VII                   7
VIII                  8
IX                    9
X                    10
XI                   11
XII                  12
XIII                 13
XIV                  14
XV                   15
XVI                  16
XVII                 17
XVIII                18
XIX                  19
XX                   20
XXI                  21
XXII                 22
XXIII                23
```

```
XXIV            24
XXV             25
XXVI            26
XXVII           27
XXVIII          28
XXIX            29
XXX             30
XXXI            31
XXXII           32
XXXIII          33
XXXIV           34
XXXV            35
XXXVI           36
XXXVII          37
XXXVIII         38
XXXIX           39
XL              40
XLI             41
XLII            42
XLIII           43
XLIV            44
XLV             45
XLVI            46
XLVII           47
XLVIII          48
```

```
XLIX            49
L               50
LI              51
LII             52
LIII            53
LIV             54
LV              55
LVI             56
LVII            57
LVIII           58
LIX             59
LX              60
LXI             61
LXII            62
LXIII           63
LXIV            64
LXV             65
LXVI            66
LXVII           67
LXVIII          68
LXIX            69
LXX             70
LXXI            71
LXXII           72
LXXIII          73
```

```
LXXIV              74
LXXV               75
LXXVI              76
LXXVII             77
LXXVIII            78
LXXIX              79
LXXX               80
LXXXI              81
LXXXII             82
LXXXIII            83
LXXXIV             84
LXXXV              85
LXXXVI             86
LXXXVII            87
LXXXVIII                      88
LXXXIX             89
XC                 90
XCI                91
XCII               92
XCIII              93
XCIV               94
XCV                95
XCVI               96
XCVII              97
XCVIII             98
```
```
XCIX               99
C                  100
Press any key to continue
```