using System.IO;

using System;

class GFG

{

// A function that prints

// given number in words

static void convert\_to\_words(char[] num)

{

// Get number of digits

// in given number

int len = num.Length;

// Base cases

if (len == 0)

{

Console.WriteLine("empty string");

return;

}

if (len > 4)

{

Console.WriteLine("Length more than " +

"4 is not supported");

return;

}

/\* The first string is not used,

it is to make array indexing simple \*/

string[] single\_digits = new string[]{ "zero", "one", "two",

"three", "four", "five",

"six", "seven", "eight",

"nine"};

/\* The first string is not used,

it is to make array indexing simple \*/

string[] two\_digits = new string[]{"", "ten", "eleven", "twelve",

"thirteen", "fourteen",

"fifteen", "sixteen", "seventeen",

"eighteen", "nineteen"};

/\* The first two string are not used,

they are to make array indexing simple\*/

string[] tens\_multiple = new string[]{"", "", "twenty", "thirty",

"forty", "fifty","sixty",

"seventy", "eighty", "ninety"};

string[] tens\_power = new string[] {"hundred", "thousand"};

/\* Used for debugging purpose only \*/

Console.Write((new string(num)) + ": ");

/\* For single digit number \*/

if (len == 1)

{

Console.WriteLine(single\_digits[num[0] - '0']);

return;

}

/\* Iterate while num

is not '\0' \*/

int x = 0;

while (x < num.Length)

{

/\* Code path for first 2 digits \*/

if (len >= 3)

{

if (num[x]-'0' != 0)

{

Console.Write(single\_digits[num[x] - '0'] + " ");

Console.Write(tens\_power[len - 3] + " ");

// here len can be 3 or 4

}

--len;

}

/\* Code path for last 2 digits \*/

else

{

/\* Need to explicitly handle

10-19. Sum of the two digits

is used as index of "two\_digits"

array of strings \*/

if (num[x] - '0' == 1)

{

int sum = num[x] - '0' +

num[x] - '0';

Console.WriteLine(two\_digits[sum]);

return;

}

/\* Need to explicitely handle 20 \*/

else if (num[x] - '0' == 2 &&

num[x + 1] - '0' == 0)

{

Console.WriteLine("twenty");

return;

}

/\* Rest of the two digit

numbers i.e., 21 to 99 \*/

else

{

int i = (num[x] - '0');

if(i > 0)

Console.Write(tens\_multiple[i] + " ");

else

Console.Write("");

++x;

if (num[x] - '0' != 0)

Console.WriteLine(single\_digits[num[x] - '0']);

}

}

++x;

}

}

// Driver Code

public static void Main()

{

convert\_to\_words("9923".ToCharArray());

convert\_to\_words("523".ToCharArray());

convert\_to\_words("89".ToCharArray());

convert\_to\_words("8989".ToCharArray());

}

}