Exercise 1: Which Century? (50 marks)

You are helping primary school pupils understand the concept of century. Write a program **century.c** to read in a year and determine which century that year falls in. You may assume that the year entered is always a positive integer.

Four sample runs are shown below, with user input shown in **bold**.

```
Enter year: 78
The year 78 falls in the 1st century.
```

```
Enter year: 1900
The year 1900 falls in the 20th century.
```

```
Enter year: 4112
The year 4112 falls in the 42nd century.
```

```
Enter year: 1109
The year 1109 falls in the 12th century.
```

You must provide a function **`printCentury()`** (you need to determine its return type and formal parameter(s) yourself) to print the line of output.

As your output requires an *ordinal suffix* ("st", "nd", "rd", or "th"), you must provide a function **`printOrdinal()`** for this purpose (again, you need to determine its return type and formal parameter(s) yourself).

The table below shows what ordinal suffix should be used on a number. Note that special suffices ("st", "nd", "rd") are given to numbers ending with 1, 2, or 3, except those ending with 11, 12, or 13 (shown in bold).

1st	2nd	3rd	4th	….	10th
11th	**12th**	**13th**	14th	….	20th
21st	22nd	23rd	24th	….	30th
…	…	…	…	…	…
101st	102nd	103rd	104th	….	110th
111th	**112th**	**113th**	114th	….	120th
121st	122nd	123rd	124th	….	130th
…	…	…	…	…	…
1401st	1402nd	1403rd	1404th	….	1410th
1411th	**1412th**	**1413th**	1414th	….	1420th
1421st	1422nd	1423rd	1424th	….	1430th

If you do not provide the required functions stated above, marks will be deducted on design.

Skeleton Program:

A skeleton program **century.c** is available in your plab account and is shown below.

```
// CS1010 AY2011/2 Semester 1
// PE1 Ex1: century.c
// Name:
// Matriculation number:
// plab account-id:
// Discussion group:
// Description:

int main(void)
{
   int year; // user's input

   printf("Enter year: ");

   return 0;
}
```