

## ChineseHoroscope

Write a program that reads in user input on birth year and prints out the corresponding Chinese horoscope sign. The program allows a user to enquire about horoscope signs until a sentinel value of -1 is used to terminate the process. There is no need to check user input errors. There are 12 signs in the Chinese horoscope. The calculation of a horoscope sign is based on birth year. The 12 Chinese horoscope signs and some of their corresponding years are given below:

Horoscope Sign	Birth Year
Rat	...1972, 1984, 1996...
Cow	...1973, 1985, 1997...
Tiger	...1974, 1986, 1998...
Rabbit	...1975, 1987, 1999...
Dragon	...1976, 1988, 2000...
Snake	...1977, 1989, 2001...
Horse	...1978, 1990, 2002...
Goat	...1979, 1991, 2003...
Monkey	...1980, 1992, 2004...
Rooster	...1981, 1993, 2005...
Dog	...1982, 1994, 2006...
Pig	...1983, 1995, 2007...

12  
4  
5  
6  
7  
8  
9  
10  
11  
0  
1  
2  
3

A sample program template is given below:

```
#include <stdio.h>
int main()
{
    /* Write your code here */
    return 0;
}
```

Sample input and output sessions are given below:

### (1) Test Case 1:

```
Enter your birth year: 1973
chineseHoroscope: Cow
Enter your birth year: 2006
chineseHoroscope: Dog
Enter your birth year: -1
```

### (2) Test Case 2:

```
Enter your birth year: 1983
chineseHoroscope: Pig
Enter your birth year: 1995
chineseHoroscope: Pig
Enter your birth year: 2007
```

```

chineseHoroscope: Pig
Enter your birth year:
2019
chineseHoroscope: Pig
Enter your birth year:
2031
chineseHoroscope: Pig
Enter your birth year:
-1

```

**(3) Test Case 3:**

```

Enter your birth year:
-1

```

```

#include <stdio.h>
int main()
{
    int year,remainder;

    while(year!=-1)
    {
        printf("Enter your birth year:\n");
        scanf("%d",&year);

        remainder = year%12;

        printf("chineseHoroscope: ");
        if(remainder == 0)
        {
            printf("Monkey\n");
        }
        if(remainder == 1)
        {
            printf("Rooster\n");
        }
        if(remainder == 2)
        {
            printf("Dog\n");
        }
        if(remainder == 3)
        {
            printf("Pig\n");
        }
        if(remainder == 4)
        {
            printf("Rat\n");
        }
        if(remainder == 5)
        {
            printf("Cow\n");
        }
        if(remainder == 6)
        {
            printf("Tiger\n");
        }
        if(remainder == 7)
        {
            printf("Rabbit\n");
        }
        if(remainder == 8)
        {
            printf("Dragon\n");
        }
        if(remainder == 9)
        {
            printf("Snake\n");
        }
        if(remainder == 10)
        {
            printf("Horse\n");
        }
        if(remainder == 11)
        {
            printf("Goat\n");
        }
    }
    return 0;
}

```