

Chinese new year began last week. It is one of the most important festivals in Chinese culture. People celebrate by decorating things in red, giving red envelopes and watching dragon or lion dances and fireworks to welcome the new year. The animal for this year is the **dragon**!

Your challenge - We're going to create a small programme which will help you write happy new year cards for all your friends, by entering their name, the year they were born, and picking a message for them.



Step 1 - Calculate the zodiac element

```
1 def calculate_zodiac_animal(birth_year):
2     zodiac_animals = ["Monkey", "Rooster", "Dog", "Pig", "Rat", "Ox", "Tiger", "Rabbit", "Dragon", "Snake", "Horse", "Goat"]
3     return zodiac_animals[(birth_year - 1900) % 12]
```

Step 2 - Build a message chooser

```
4
5 def choose_new_year_message():
6     print("Choose a New Year message for your greeting card:")
7     print("1. Wishing you a year filled with happiness and prosperity!")
8     print("2. May the New Year bring you joy and good fortune!")
9     print("3. Wishing you health, wealth, and happiness in the New Year!")
10    print("4. May the Year of the Dragon bring you success and fulfillment!")
11
12    choice = input("Enter your choice (1-4): ")
13
14    messages = [
15        "Wishing you a year filled with happiness and prosperity!",
16        "May the New Year bring you joy and good fortune!",
17        "Wishing you health, wealth, and happiness in the New Year!",
18        "May the Year of the Dragon bring you success and fulfillment!"
19    ]
20
21    try:
22        return messages[int(choice) - 1]
23    except IndexError:
24        print("Invalid choice. Please choose again.")
25        return choose_new_year_message()
```

Step 3 - Generate the greeting card message

```
27 def generate_greeting_card(name, birth_year, zodiac_animal, new_year_message):
28     print(f"\nGenerating Greeting Card...\n")
29     print("*****")
30     print(f"        Happy Chinese New Year, {name}!")
31     print("*****")
32     print(f"Your Chinese zodiac animal is the {zodiac_animal}")
33     print("*****")
34     print(f"{new_year_message}")
35     print("*****\n")
36
```

Step 4 - Create the main programme which ties everything together!

```
37 def main():
38     print("Welcome to the Chinese New Year Greeting Card Generator!\n")
39     name = input("Enter your friends name: ")
40     birth_year = int(input("Enter your friends year of birth: "))
41     zodiac_animal = calculate_zodiac_animal(birth_year)
42     print(f"\nYour friend, {name}, has the Chinese zodiac animal of the {zodiac_animal}.")
43
44     new_year_message = choose_new_year_message()
45     print(f"\nYou chose the following New Year message for your greeting card:\n{new_year_message}")
46     generate_greeting_card(name, birth_year, zodiac_animal, new_year_message)
47
48 if __name__ == "__main__":
49     main()
```

