BLM103E - COMPUTER PROGRAMMING I
Programming Assignment # 1
DUE DATE: 26/03/2021 - 23:59 (No extension)

1. Suppose you want to develop a program that changes a given amount of money into smaller monetary units. The program lets the user enter an amount as a double value representing a total money in "TL" and "kuruş", and outputs a report listing the monetary equivalent in the maximum number of 200TLs, 100TLs, 50TLs, 20Tls, 10TLs, 5TLs, 1TLs, and 50Krs, 25Krs, 10Krs, 5Krs, 1Krs, in this order, to result in the minimum number of coins.
An example output of your program should be like that:

```
Enter an amount in double, for example 11.56: 586.86
Your amount 586.86 consists of
    2 200TLs
    1 100TLs
    1 50TLs
    1 20TLs
    1 10TLs
    1 5TLs
    1 1TLs
    1 50Krs
    1 25Krs
    1 10Krs
    0 5Krs
    1 1Krs
```

Important Note: The output of your program must be the same as the example above. Since your program will be automatically graded, a different kind of output may fail.

2. Zeller's congruence is an algorithm developed by Christian Zeller to calculate the day of the week. The formula is

$$h = \left(q + \frac{26(m+1)}{10}\right) + k + \frac{k}{4} + \frac{j}{4} + 5j)\%7$$

where

- h is the day of the week (0: Saturday, 1: Sunday, 2: Monday, 3: Tuesday, 4: Wednesday, 5: Thursday, 6: Friday).
- q is the day of the month.
- m is the month (3: March, 4: April, …, 12: December). January and February are counted as months 13 and 14 of the previous year.
- j is the century (i.e., $\frac{year}{100}$).
- k is the year of the century (i.e., $year$ % 100).

Note that the division in the formula performs an integer division. Write a program that prompts the user to enter a year, month, and day of the month, and displays the name of the day of the week. An example output of your program should be like that:

```
Enter year: (e.g., 2012): 2015
Enter month: 1-12: 1
Enter the day of the month: 1-31: 25
Day of the week is Sunday
```

(*Hint*: January and February are counted as 13 and 14 in the formula, so you need to convert the user input 1 to 13 and 2 to 14 for the month and change the year to the previous year.)