Question 1:

Write a Python **“For loop”** that counts from 0 to 4. For each number in this range, print the word 'hello' followed by the current number.

Question 2:

Let's see how your treasure grows each week. You start with 20 coins you found. Each week, you gain 70 magic coins but lose 3 coins due to theft.

Write a Python “`for` loop” to show how many coins you have at the end of each of the 52 weeks.

Your Task:

Write a Python **`for` loop** that simulates the increase in coins over 52 weeks using the following variables:

- `found_coins` = 20 (Starting number of found coins)
- `magic_coins_per_week` = 70 (Magic coins gained each week)
- `stolen_coins_per_week` = 3 (Coins lost due to theft each week)

Print the total number of coins at the end of each week in the format: `'Week X = Y'`, where `X` is the week number and `Y` is the current number of coins.

Question 3:

Write a Python `for` loop to iterate over a list of numbers (`numbers = [5, 10, 15, 20, 25]`). Inside the loop, check if each number is even or odd. If the number is even, print `'Number X is even'`, otherwise print `'Number X is odd'`, where `X` is the current number from the list.

Question 4:

Create a Python `for` loop to iterate through a string (`message = "hello world"`). Inside the loop, check if each character is a vowel (`'a'`, `'e'`, `'i'`, `'o'`, `'u'`). If a character is a vowel, print `'Vowel found: character'`, otherwise print `'Consonant found: character'`, where `character` is the current character from the string.

Question 5:

Implement a Python `for` loop to iterate over a list of names (`names = ['Alice', 'Bob', 'Charlie', 'David', 'Eve']`). Inside the loop, check if a name starts with the letter `'A'`. If a name starts with `'A'`, print `'Name starting with A: name'`, otherwise print `'Name not starting with A: name'`, where `name` is the current name from the list.

Question 6:

Write a Python `for` loop to iterate through a list of numbers (`numbers = [3, 7, 12, 9, 5]`). Inside the loop, check if each number is greater than 5. If a number is greater than 5, print `'Number X is greater than 5'`, otherwise print `'Number X is not greater than 5'`, where `X` is the current number from the list.

Question 7:

Create a Python `for` loop to iterate over a dictionary of student grades (`grades = {'Alice': 85, 'Bob': 72, 'Charlie': 90, 'David': 68}`). Inside the loop, check if a student's grade is above or equal to 80. If a grade is 80 or above, print `'Student X scored well'`, otherwise print `'Student X needs improvement'`, where `X` is the current student's name from the dictionary.