# Module 5.3 For Loop 2: Coding Questions with Hints

## Question 1: Iterate over a list using a for loop to print each item squared.

Hint: Use a for loop directly on the list and print the square of each item inside the loop.

## Question 2: Use a for loop to print numbers from 10 down to 1.

Hint: Use the range() function with appropriate start, stop, and step arguments to count backwards.

## Question 3: Write a for loop that iterates over a string and prints the index of each character alongside the character.

Hint: Use the enumerate() function to get both the index and the character in the loop.

## Question 4: Use a for loop to concatenate all the elements in a list into a single string.

Hint: Initialize an empty string before the loop, then concatenate each list item to this string within the loop.

## Question 5: Iterate over a dictionary and print only the values that are even.

Hint: Use a for loop with the .values() method on the dictionary, and an if statement to check for evenness.

## Question 6: Write a for loop to create a list of the first 10 Fibonacci numbers.

Hint: Initialize a list with the first two Fibonacci numbers, then use a loop to calculate and append the next numbers.

## Question 7: Use a for loop over a list of numbers to print out each number multiplied by itself, but only if the number is greater than 5.

Hint: Combine a for loop with an if statement to check the number before printing its square.

## Question 8: Iterate over a list of words and print each word on a new line, but in uppercase.

Hint: Use the .upper() method on each word within a for loop to print it in uppercase.

## Question 9: Write a for loop that iterates over two lists simultaneously to print items from each list side by side.

Hint: Use the zip() function to pair items from the two lists in the loop.

## Question 10: Create a nested for loop to print a 5x5 matrix of asterisks ('\*').

Hint: Use two for loops, one nested within the other, with range(5) to print a 5x5 grid of asterisks.