

## Sample Python Questions

1. Write a python program that takes a word from the user and prints the word in reverse order.  
Example: Input: apple      output: elppa
2. Write a Python program that simulates a login system. The program should ask for username and password and allow only three attempts. Display appropriate messages for success and failure.
3. Write a Python program that prints the word PGC using stars (\*). Use nested loops to draw each letter.
4. Write a Python program that prints a pyramid pattern of numbers like this:

```
1  
2 3 2  
3 4 5 4 3  
4 5 6 7 6 5 4  
5 6 7 8 9 8 7 6 5
```

5. Write a Python program that checks whether a number entered by the user is a palindrome or not.  
(A palindrome number reads the same backward as forward, such as 121 or 4554.)
6. Write a Python program that asks the user to enter a height value and prints a hollow diamond shape made of stars (\*). For example, if the user enters 5, the output should look like this:
7. Write a Python program that takes a list of numbers from the user and finds the second largest number in the list.
8. Create a function that takes two numbers (start and end) and returns a list of all prime numbers between them.
9. Write a recursive function to calculate the sum of all numbers from 1 to n.
10. Write a Python program using turtle graphics to draw **10 circles inside each other** (concentric circles). Each circle should be slightly bigger than the previous one.
11. Write a turtle graphics program to draw a **traffic signal** with three circles colored red, yellow, and green.