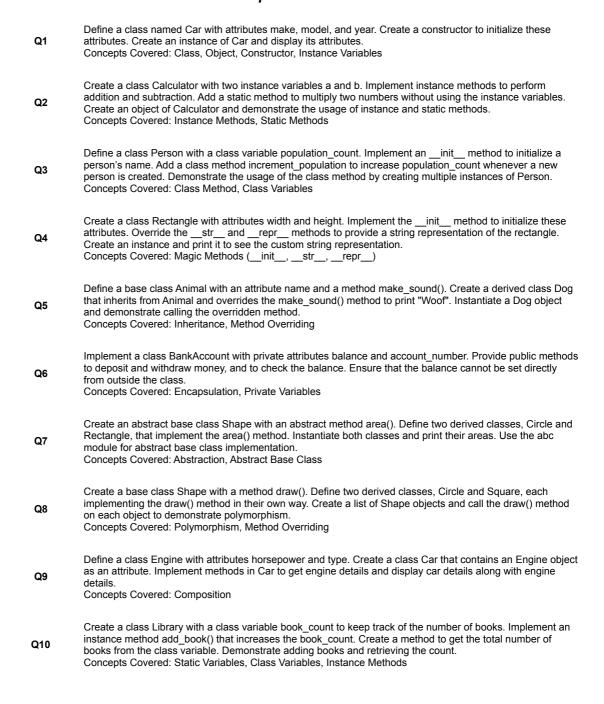
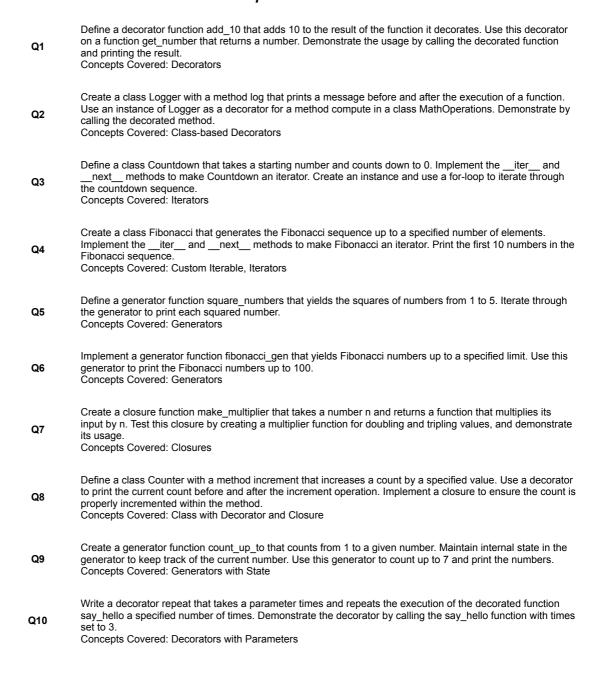
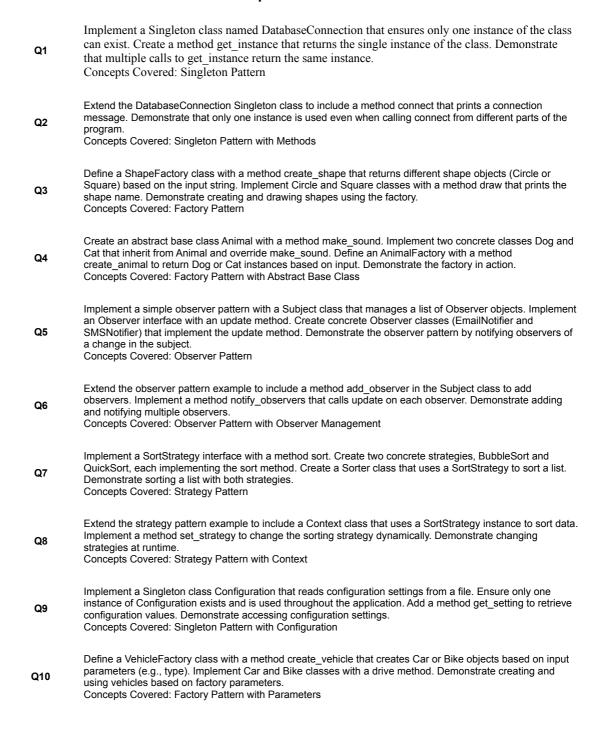
Experiment 1 - Bucket List



Experiment 2 - Bucket List



Experiment 3 - Bucket List



Experiment 4 - Bucket List

Q1	Write a program to find the longest common substring between two strings.
Q2	Implement a program to calculate the minimum number of operations (insertions, deletions, substitutions) required to convert one string into another
Q3	Design a program to find the longest subsequence in a string that is also a palindrome.
Q4	Write a program to find the shortest sequence that has both input sequences as subsequences.
Q5	Develop a program to find the longest subsequence in an array of integers that is strictly increasing.
Q6	Implement a program to find the longest subsequence that appears more than once in a given string.
Q7	Create a program to find the contiguous subarray within a one-dimensional array of numbers that has the largest sum.
Q8	Write a program to determine the maximum value that can be obtained by putting items in a knapsack with a given weight capacity.
Q9	Develop a program to find the most efficient way to multiply a chain of matrices.
Q10	Design a program to determine whether a subset of a given set of numbers adds up to a specific target sum.

Experiment 5 - Bucket List

Q1	Implement a program to solve the fractional knapsack problem where you can take fractions of items.
Q2	Write a program to solve the knapsack problem where you can take an unlimited number of each item.
Q3	Design a program to determine the minimum number of coins needed to make a specific amount of money from a given set of coin denominations.
Q4	Develop a program to determine the maximum profit obtainable by cutting a rod of a given length into pieces with given values.
Q5	Implement a program to find whether a subset of a given set of integers sums up to a given target.
Q6	Write a program to determine whether a given set can be partitioned into two subsets with equal sums
Q7	Design a program to find the maximum profit you can make by scheduling jobs within their deadlines, considering their respective profits.
Q8	Create a program to find the length of the longest palindromic subsequence in a given string.
Q9	Implement a program to find the length of the shortest common supersequence of two strings.
Q10	Develop a program to maximize the value obtained by cutting a rod into various lengths based on given prices for each length

Experiment 6 - Bucket List

Implement a program to calculate the nth Tribonacci number, where each term is the sum of the previous Q1 Write a program to determine how many distinct ways you can climb a staircase with n steps, where you can Q2 take 1 or 2 steps at a time. Create a program to calculate the number of unique paths from the top-left corner to the bottom-right corner Q3 of a grid, moving only right or down Q4 Develop a program to calculate the nth Catalan number, which appears in various combinatorial problems. Q5 Write a program to determine the number of ways to tile a 2 x n board using 2 x 1 tiles. Q6 Implement a program to find the length of the longest increasing subsequence in an array of numbers Q7 Design a program to generate all combinations of n pairs of balanced parentheses. Create a program to find the minimum number of jumps needed to reach the end of an array, where each Q8 element represents the maximum jump length at that position. Develop a program to find the minimum number of attempts needed to find the critical floor in a building with k floors using n eggs. Q9 Write a program to calculate the nth Bell number, which represents the number of ways to partition a set of n Q10 elements.