List Processing

List Processing: Sample Program List

fortune_cookies.py

This program illustrates the list indexing. The program maintains a list of fortunes (string data) and displays a randomly selected fortune when requested by the user.

slicing_illustrated.py

This program illustrates the list slicing operation. It creates a list of integers ranging from 10 to 200, inclusive. You enter the low and high bounds, and the program displays a list[low:high].

find_min_max_avg.py

This program shows the basic scanning of a list using various techniques. Two hundred random integers are generated, and the program computes the minimum, maximum, and average of the 200 integers.

big_lotto.py

This program illustrates the list membership test using the 'in' operator. The program generates a random list of five numbers, ranging from 1 to 47. The player guesses the five numbers, and if all five numbers match the numbers in the list, the player wins. The prize is an A in the class.

search_employee_table.py

This sample program illustrates how the nested list is used to represent tabular data. The program searches for employees whose salaries fall between the given low and high values. The name of the matching employees are displayed at the end.

list_memory_allocation.py

This program contrasts the list method 'append' and the list concatenation operation. It shows how the list method changes the list itself whereas the concatenation operation creates a new list with the original list unchanged.