

PROJECT 7

DYNAMIC PROGRAMMING

SYNOPSIS

Working either individually or in teams of two or three, write a program that will solve two specific types of dynamic programming problems.

YOUR TASK

Write a computer program (really two programs bundled into one) in the language of your choice that will solve the following types of problems.

1. Problems in the form of #19.18.
2. Stochastic dynamic programming problems analogous to one particular model problem of this type in Chapter 19. Choose from 19.31, 19.34, 19.36, 19.39.

WHAT YOUR PROGRAM SHOULD DO

1. Prompt the user for the type of problem to be solved.
2. Prompt the user to input the dimensions of the problem.
3. Prompt the user to input the function values. Save these in an array.
4. Calculate and display the returns and decisions.
5. Calculate and display the optimal return and decision.
6. Give the opportunity to run the program again.