

Arrays

Date:01-Sep-2021

Single-Dimensional Array

1. Write a C program that identifies the odd elements in two arrays and creates a third array with those elements.
2. You are an organizer of a technical symposium in your college. You have collected the participant IDs (Register Numbers) of students registered for online quiz and paper presentation. Write a C program that creates two arrays for storing the IDs of students registered for online quiz and paper presentation appropriately. The program should identify and display the IDs of participants who have registered for both quiz and paper presentation.

Multi-dimensional Array

1. The Sports in charge submits a purchase list of equipment's for a tournament. There are two teams Women Team and Men Team. The list of items to be purchased and its cost are given in the tables (Table 1 and Table 2) below,

Table 1

| | Bat | Ball | Sports Uniform |
|-------|-----|------|----------------|
| Women | 11 | 35 | 12 |
| Men | 14 | 45 | 18 |

Table 2

| | Price (₹) |
|----------------|-------------|
| Bat | 2000 |
| Ball | 100 |
| Sports Uniform | 1000 |

Represent the tables as multidimensional array and write a C program to find the total cost of equipment for each team.[Hint: Use appropriate mathematical computations.]

2. In a bakery there are “n” rectangular bowls of width “W” and depth “H”, represented as {W, H}. You are asked to stack all the bowls by fitting a small bowl inside the big bowl. A bowl will fit into the other only if its depth and width is smaller than the other. Write a C program that finds the maximum number of bowls that can be placed in another bowl.

Example:

Input: Bowl [] = {{2, 5}, {4, 3}, {3, 7}, {5, 8}, {9, 6}, {11, 11}}

Output: 4

Explanation: The maximum number of bowl that can be placed inside another bowl is 4.
{(2, 5), {3, 7}, {5, 8}, {11, 11}}