#include <stdio.h>

#define P 5 // Processes

#define R 3 // Resources

int main() {

// Example: Maximum matrix (Max demand for each process)

int max[P][R] = {

{7, 5, 3},

{3, 2, 2},

{9, 0, 2},

{2, 2, 2},

{4, 3, 3}

};

// Example: Allocated matrix (Allocated resources to each process)

int alloc[P][R] = {

{0, 1, 0},

{2, 1, 1},

{3, 2, 2},

{2, 1, 1},

{0, 0, 2}

};

// Need matrix to store the result

int need[P][R];

// Calculate Need matrix and print it

printf("Need Matrix:\n");

for (int i = 0; i < P; i++) {

for (int j = 0; j < R; j++) {

need[i][j] = max[i][j] - alloc[i][j];

printf("%d\t", need[i][j]);

}

printf("\n");

}

return 0;

}

Need Matrix:

7 4 3

1 1 1

6 -2 0

0 1 1

4 3 1