

LEAST COST METHOD CODE:-

```
function [cost, allocation] = least_cost_method(cost_matrix, supply, demand)
    [m, n] = size(cost_matrix);
    allocation = zeros(m, n);

    while any(supply > 0) & any(demand > 0)
        min_cost = min(cost_matrix(:));
        [row, col] = find(cost_matrix == min_cost, 1);

        if supply(row) < demand(col)
            allocation(row, col) = supply(row);
            demand(col) = demand(col) - supply(row);
            supply(row) = 0;
        else
            allocation(row, col) = demand(col);
            supply(row) = supply(row) - demand(col);
            demand(col) = 0;
        end

        cost = sum(sum(allocation .* cost_matrix));
    end
end

// Example usage:
cost_matrix = [3 6 4; 7 2 8; 5 9 1];
supply = [20; 30; 40];
demand = [25 35 30];

[cost, allocation] = least_cost_method(cost_matrix, supply, demand);
disp(cost);
disp(allocation);
```