#include <stdio.h>

#include <limits.h>

int min(int a, int b) {

return (a < b) ? a : b;

}

int minCoins(int coins[], int n, int amount) {

int dp[amount + 1];

dp[0] = 0;

for (int i = 1; i <= amount; i++) {

dp[i] = INT\_MAX;

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

if (i >= coins[j]) {

dp[i] = min(dp[i], dp[i - coins[j]] + 1);

}

}

}

return dp[amount];

}

int main() {

int coins[] = {1, 5, 10, 25}; // Coin denominations

int n = sizeof(coins) / sizeof(coins[0]);

int amount = 36; // The amount for which change is needed

int result = minCoins(coins, n, amount);

printf("Minimum number of coins needed: %d\n", result);

return 0;

}