#include <stdio.h>

int max(int a, int b) {

return (a > b) ? a : b;

}

int maxCoinSum(int coins[], int n) {

if (n <= 0) {

return 0;

}

int max\_sum[n];

max\_sum[0] = coins[0];

max\_sum[1] = max(coins[0], coins[1]);

for (int i = 2; i < n; i++) {

max\_sum[i] = max(max\_sum[i-1], max\_sum[i-2] + coins[i]);

}

return max\_sum[n-1];

}

int main() {

int coins[] = {2, 4, 1, 9, 7, 5, 8};

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

int result = maxCoinSum(coins, n);

printf("Maximum sum of non-adjacent coins: %d\n", result);

return 0;

}