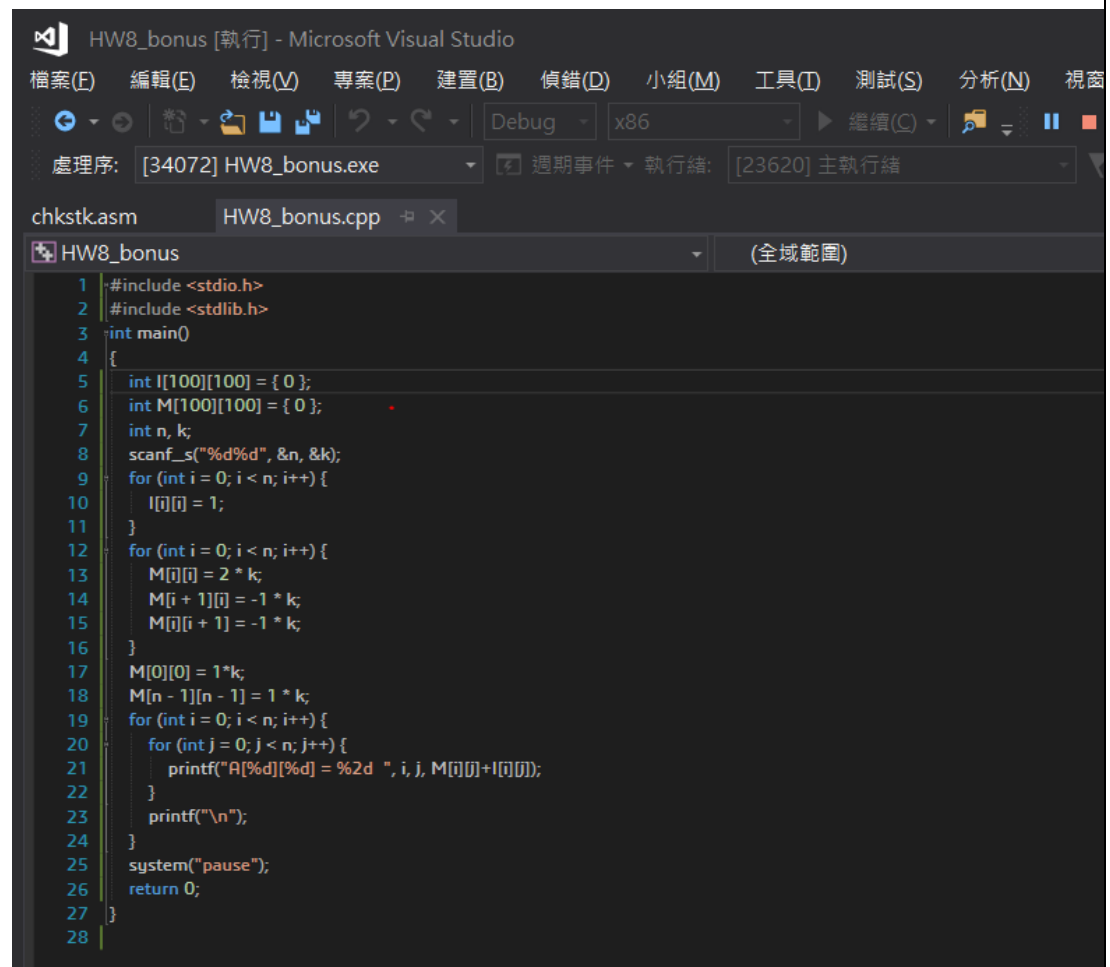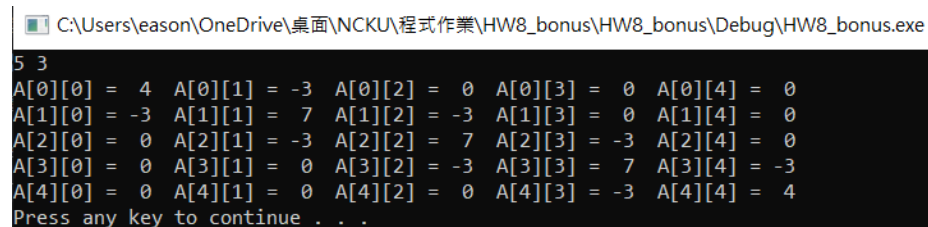Bonus1.

.cpp

```c
#include <stdio.h>
#include <stdlib.h>
int main()
{
    int I[100][100] = { 0 };
    int M[100][100] = { 0 };
    int n, k;
    scanf_s("%d%d", &n, &k);
    for (int i = 0; i < n; i++) {
        I[i][i] = 1;
    }
    for (int i = 0; i < n; i++) {
        M[i][i] = 2 * k;
        M[i + 1][i] = -1 * k;
        M[i][i + 1] = -1 * k;
    }
    M[0][0] = 1*k;
    M[n - 1][n - 1] = 1 * k;
    for (int i = 0; i < n; i++) {
        for (int j = 0; j < n; j++) {
            printf("A[%d][%d] = %2d  ", i, j, M[i][j]+I[i][j]);
        }
        printf("\n");
    }
    system("pause");
    return 0;
}
```

執行結果

C:\Users\eason\OneDrive\桌面\NCKU\程式作業\HW8_bonus\HW8_bonus\Debug\HW8_bonus.exe

```
5 3
A[0][0] =  4  A[0][1] = -3  A[0][2] =  0  A[0][3] =  0  A[0][4] =  0
A[1][0] = -3  A[1][1] =  7  A[1][2] = -3  A[1][3] =  0  A[1][4] =  0
A[2][0] =  0  A[2][1] = -3  A[2][2] =  7  A[2][3] = -3  A[2][4] =  0
A[3][0] =  0  A[3][1] =  0  A[3][2] = -3  A[3][3] =  7  A[3][4] = -3
A[4][0] =  0  A[4][1] =  0  A[4][2] =  0  A[4][3] = -3  A[4][4] =  4
Press any key to continue . . .
```