

HW 2(B): LOOP ANALYSIS

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QUESTION 3

```
double A[512][512], B[512][512];
for(k = 0; k < 512; k++)
    for(i = 0; i <= k; i++)
        for(j = 0; j < 512; j++)
            C[i][j] += A[i][k] * B[k][j];
```

QUESTION 4

```
double A[512][512], B[512][512];
for(i = 0; i < 512; i = i + 2)
    for(j = 0; j < 512; j = j + 2)
        for(k = i; k < 512; k++){
            C[i][j] += A[i][k] * B[k][j];
            C[i+1][j] += A[i+1][k] * B[k][j];
            C[i][j+1] += A[i][k] * B[k][j+1];
            C[i+1][j+1] += A[i+1][k] * B[k][j+1];
        }
```