**Question 1 What is the time, space complexity of following code: int a = 0, b = 0; for (i = 0; i < N; i++) { a = a + 1; } for (j = 0; j < M; j++) { b = b + j; }**

**asns-3. O(N + M) time, O(1) space**

**Question 2 What does it mean when we say that an algorithm X is asymptotically more efficient than Y? a)X will be a better choice for all inputs b)X will be a better choice for all inputs except possibly small inputs c)X will be a better choice for all inputs except possibly large inputs d)Y will be a better choice for small inputs**

**-B**