

Question 4:

a. Number of loops running=3

Number of times outer loop runs= n

Number of times inner loop= $m-1$

The function compute runs for one time, then two times and so on in the respective iterations. Therefore it runs for (m^2-m) times.

Total time taken= $m*(m^2-m)$

We arrive at a function that runs for n^3 .

For both upper and lower bound is n^3 .

b. It multiplies the elements of A from i th index to j th index with each other and stores them at $B[i][j]$.

