**Open MP Questions list**

1. **Write a C program using OpenMP features to create two parallel threads. The first thread should push the first ‘N’ natural numbers into a stack in sequence, and the second thread should pop the numbers from the stack.**
2. **Write a C program using OpenMP features to create three parallel threads. The first thread should display the value of a global variable, ‘X’; the second thread should increment the value of the same global variable, ‘X’ and the third thread should decrement the value of ‘X’.**
3. **Write a C program using OpenMP features to create two parallel threads. The first thread should insert the first ‘N’ natural numbers into a queue in sequence, and the second thread should remove the numbers from the queue.**
4. **Write a C program using OpenMP features to find the sum/difference of two matrices in linear time. The program should then find row wise average of the sum matrix.**
5. **Write a C program using OpenMP features to create two parallel threads to simulate a linear queue. The first thread should implement the insert operation on the linear queue. The second thread should implement the remove operation on the linear queue. Both the threads should run infinitely.**
6. **Write a C program using OpenMP features to implement one reader and one writer threads. The reader thread should display the value of a global variable, whereas the writer thread should increment the value of the global variable. Both the threads should run infinitely.**
7. **Write a C program using OpenMP features to find the product of two nxn matrices. The program should then find the sum of all the elements of the product matrix.**
8. **Write a C program using OpenMP features to find the cross product of two vectors in constant time complexity.**
9. **Write a C program using OpenMP features to find the row wise/column wise sum of a matrix in linear time complexity.**
10. **Write a C program using OpenMP features to find the sum of the first ‘n’ terms of the following series:**

**X.(X+1) + (X+1).(X+2) + (X+2)(X+3) + …**

**Where, ‘X’ and ‘n’ are two values input by the user.**

1. **Write a C program using OpenMP features to find the determinant of a 3x3 matrix.**
2. **Write a C program using OpenMP features to find the column wise/ row wise average of a matrix in linear time complexity.**
3. **Write a C program using Open MP features to find the dot product of two vectors of size n each in constant time complexity. [Hint: Dot product = Ʃ(A[i]\*B[i])]**
4. **Write a C program using OpenMP features to find the cross product of two vectors of size n each in constant time complexity. [Hint: Cross product C[i] = (A[i]\*B[i])]**