**Question 8:**

main()

{

    static int a[3][3] = {1, 2, 3, 4, 5, 6, 7, 8, 9};

    int i, j;

    static \*p[] = {a, a + 1, a + 2};

    for (i = 0; i < 3; i++)

    {

        for (j = 0; j < 3; j++)

            printf("%d\t%d\t%d\t%d\n", \*(\*(p + i) + j), \*(\*(j + p) + i), \*(\*(i + p) + j), \*(\*(p + j) + i));

    }

}

The Output of the above Program is :

1 1 1 1

2 4 2 4

3 7 3 7

4 2 4 2

5 5 5 5

6 8 6 8

7 3 7 3

8 6 8 6

9 9 9 9

**Analysis :**

* \*(\*(p + i) + j) is evaluated to the values of a[0][0], a[0][1], a[0][2], a[1][0] and so on in each of the iterations of the for loop and they print 1,2,3 and so on.
* \*(\*(j + p) + i) is evaluated to the values of a[0][0], a[1][0], a[2][0], a[0][1], a[1][1], a[2][1], a[0][2], a[1][2] and a[2][2] in each of the iterations of the for loop and they print 1, 4, 7, 2, 5, 8, 3, 6 and 9.
* \*(\*(i + p) + j) is evaluated and its result is the same as \*(\*(p + i) + j)
* \*(\*(p + j) + i)is evaluated and its result is the same as \*(\*(j + p) + i)