Circuit diagram :
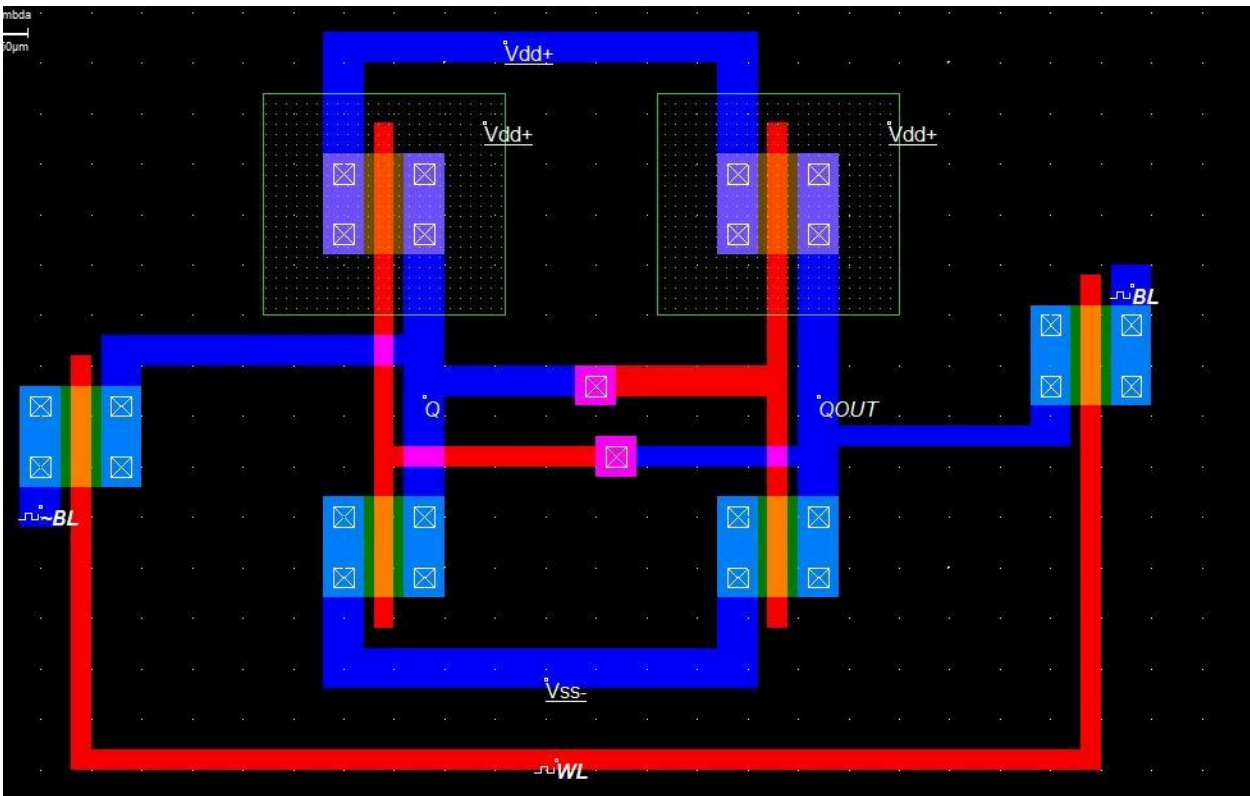

Output: