In this thesis we investigate the loss of mass from binary systems from the vicinity of the second Lagrange point L2. This phenomenon arises mainly in the common envelope evolutionary phase of close binary systems when the cores of the components orbit inside a shared gaseous envelope. It is a crucial but poorly understood stage in the system's development with two substantially different possible outcomes – stellar merger or formation of a close binary system with compact components. Modifying mass, energy and angular momentum of the binary, mass loss through the L2 point might significantly impact the system's evolution throughout the common envelope phase. Using numerical integration of equations of motion, we evaluate final states of test particles ejected from the proximity of the L2 point with arbitrary initial velocity with respect to the corotating reference frame. Furthermore, we compute the amount of energy and angular momentum these particles carry away from the system. Previously, only the particles ejected from the L2 point from initial corotation were studied; this work is therefore the first to address this problem with general initial conditions. Firstly, we initiate the particles at the L2 point with velocity pointing in the direction of x-axis and y-axis. Secondly, we eject the particles from corotation from the area surrounding the L2 point. Finally, we study the behaviour of particles that are ejected from the neighbourhood of the L2 point with radial velocity and with tangential velocity pointing in and opposite to the direction of system's rotation. In most cases we found a set of initial conditions allowing the particle to escape from the system to infinity.