Problem 1: Linked List of coordinate System

Description:

Create a linked list where each node contains integer x and y coordinates of point. Implement following functions:

1> AddFirst(x,y): This function adds a node at the start of the linked list.
2> DelFirst(): This function deletes the first node of the linked list.
3> Del(x,y): This function deletes the node with point containing 'x' x-coordinate and 'y' y-coordinate.
4> Search(d): This function gives all the points that are present at most at d-distance(Euclidean) from origin.
5> Search(x,y): This function return true if point with 'x' x-coordinate and 'y' y-coordinate is present in the linked list.
6> Length(): This function gives the length of the linked list, i.e., the number of nodes present in the list.

Input Format:

- Each line of the input contains **F** representing the function number followed by space separated $\mathbf{A}_i$ argument(s) if required for the corresponding function.

Output Format:

Example Input:

- 1 2 3 (Adds node with (2,3) coordinate point at the beginning of the linked list)
- 1 3 4 (Adds node with (3,4) coordinate point at the beginning of the linked list)
- 1 5 6 (Adds node with (5,6) coordinate point at the beginning of the linked list)
- 1 1 1 (Adds node with (1,1) coordinate point at the beginning of the linked list)
- 1 2 9 (Adds node with (2,9) coordinate point at the beginning of the linked list)
- 2 (Deletes the node at the beginning of the linked list i.e., (2,9))
- 3 1 1 (Deletes the node with (1,1) coordinate point from the linked list)
- 4 5
- 5 2 3
- 5 4 6
- 6

Example Output:

- (2,3) (3,4)
- True
- False
- 3