Use the lab5Starter.cpp as a started file. Modify the program so it generates 1000 points with a random x and y being values between 0 and 10000 and random c being either an 'A', 'B' or 'C'. Your program should ask for a point from the user and your program should assign a c value to that point based on the 5 closest points to it. The c value will be equal to the most common c value of the 5 closest points.(in the case of a tie it should become an A if A and B tie, a B if B and C tie and an A is A and C tie). It should print out the 5 nearest points and the c value of the input point.

Enter X and Y 0 0
(14,9) is class A and the distant is 16.6433
(9,52) is class B and the distant is 52.7731
(17,52) is class A and the distant is 54.7083
(57,4) is class B and the distant is 57.1402
(36,46) is class B and the distant is 58.4123
(0,0) is class B