**Part B**

The algorithm is correct.

Convex polygon properties:

All polygons with all internal angles less than or equal to 180 degrees are convex by definition.

We also know that the order of a convex polygon’s points can be obtained by moving counter-clockwise or clockwise.

Algorithm:

As the algorithm checks that that the consecutive point (in a counter-clockwise direction) to the line section is always to the left or collinear, it ensures that:

1. The internal angle stays to the left, so;
2. The internal angle is always less than or equal to 180 degrees

Therefore, the points must form a convex polygon as all its internal angles are less than or equal to 180 degrees.