ASSIGNMENT OF NAIVE BAYES

Do the following questions.

1. Suppose that the Naive Bayes Classifier algorithm will be used to determine whether an object is included in the category for residential areas or not. To determine an area as a location for housing construction, 10 rules and 4 attributes have been compiled, namely:
    a. land price per square meter (C1),
    b. the distance of the area from the city center (C2),
    c. the presence or absence of public transportation in the area (C3), and
    d. the decision to choose the area as a housing location (C4).

Rule i-th	Land Price	Distance from the City Center	Availability of Public Transportation	Selected for Housing
1	Cheap	Not Far	No	Yes
2	Medium	Not Far	No	Yes
3	Expensive	Not Far	No	Yes
4	Expensive	Far	No	No
5	Expensive	Medium	No	No
6	Medium	Far	Yes	No
7	Cheap	Far	Yes	No
8	Cheap	Medium	No	Yes
9	Expensive	Far	Yes	No
10	Medium	Medium	Yes	Yes

    If it is known an area with an EXPENSIVE land price, the distance from the city center is MEDIUM, and there is public transportation, then is this area worthy of being a residential area?

2. Implement question no. 1 using Python or Matlab.