OVERVIEW

Body mass index (BMI) is a value derived from the mass (weight) and height of a person. The BMI is defined as the body mass divided by the square of the body height, and is expressed in units of kg/m^2, resulting from mass in kilograms and height in meters. The BMI may be determined using a table or chart which displays BMI as a function of mass and height using contour lines or colors for different BMI categories, and which may use other units of measurement (converted to metric units for the calculation). The BMI is a convenient way for classifying persons in to 4 categories based the BMI value as shown the following table:

BMI value	Category
Less than 18.5	Underweight
18.5 to less than 25	Normal
25 to less than 30	Overweight
30 or higher	Obese

A national study in some country to analyze the BMI of the people in the country is considered. In this study, a set of cities is selected in the study and randomly specific number of persons are selected to check the BMI category of each one.

Implement a java project to help in the study analysis with the following steps:

- Read from the user the number of cities (minimum 6 cities.)
- For each city: city name and the number of persons (minimum 10 persons) are entered.
- For each person in a city: mass and height should be entered, BMI and BMI category have to be computed and printed.
- For each city, the number of persons and percent ratio in each BMI category should be computed and printed.
- Finally, the program should print a summary report with the following details:
    - Number of cities.
    - Total number of persons and percent ratio of persons in each BMI category in all cities.
    - The name of the best city which has the maximum percent of persons in *normal weight* BMI category and these people's percent ratio.
    - The name of the worst city which has the maximum percent of persons in *obese* BMI category and these people's percent ratio.
    - The name of the city which has the minimum percent of persons in *underweight* BMI category and these people's percent ratio.

End of TMA,