CI603 Data Mining

Tutorial 2 Part I

(solution)

1. Classify the following attributes as binary, discrete, or continuous. Also classify them as qualitative (nominal or ordinal) or quantitative (interval or ratio). Some cases may have more than one interpretation, so briefly indicate your reasoning if you think there may be some ambiguity.

    Example: Age in years. Answer: Discrete, quantitative, ratio.

   a. Time in terms of AM or PM.
      Discrete, qualitative, nominal.

   b. Brightness as measured by a light meter.
      Continuous, quantitative, ratio.

   c. Brightness as measured by people's judgements.
      Discrete, qualitative, ordinal (very bright, bright, not bright).

   d. Angles as measured in degrees between 0 and 360.
      Continuous, quantitative, ratio.

   e. Bronze, Silver and Gold medals awarded at the Olympics.
      Discrete, qualitative, ordinal.

   f. Height above the sea level.
      Continuous, quantitative, ratio.

   g. Number of patients in a hospital.
      Discrete, quantitative, ratio.

   h. ISBN numbers for books. (look up the format on the Web)
      Discrete, qualitative, nominal.

   i. Ability to pass light in terms of the following values: opaque, translucent, transparent.
      Discrete, qualitative, ordinal.

   j. Military rank.
      Discrete, qualitative, ordinal.

   k. Distance from the centre of campus.
      Continuous, quantitative, ratio.

   l. Density of a substance in grams per cubic meter.
      Continuous, quantitative, ratio.