Assignment No. 03

Deadline date:

Your assignment must be uploaded/submitted before or on October 29, 2015.

Assignment Marks: 20

Uploading instructions

Please view the **assignment submission process** document provided to you by the Virtual University to upload the assignment.

Rules for Marking

It should be clear that your assignment will not get any credit if:

- o The assignment is submitted after due date o
  The assignment is copied

Problems

Q 1) Suppose the hypothetical training data given in the table below. There are three attributes: "Film Language", "Film Type" and "Film's Country of Origin". The concept to be learnt is a Boolean concept, so attribute "Success" takes a TRUE or a FALSE, depending on the values of the attributes.

Film	Film Language (L)	Film Type (T)	Film's Country of Origin (O)	Success
F1	English	Science Fiction	USA	TRUE
F2	Urdu	Comedy	India	FALSE
F3	Punjabi	Action	Pakistan	FALSE
F4	English	Romance	USA	TRUE
F5	English	Comedy	USA	TRUE
F6	Urdu	Romance	Pakistan	FALSE
F7	Punjabi	Comedy	Pakistan	TRUE
F8	Urdu	Romance	India	FALSE
F9	English	Science Fiction	USA	TRUE
F10	Urdu	Romance	India	FALSE
F11	Urdu	Action	Pakistan	FALSE
F12	English	Science Fiction	USA	TRUE
F13	Punjabi	Action	Pakistan	FALSE
F14	English	Comedy	USA	TRUE

Calculate the information gain for each attribute.