

1. Table 1 depicts the case-base for spillway gate decision for Kuantan Dam. There are four river connected to the Kuantan Dam that will affect the *Dam Water Level*, which are *Sg. Pahang*, *Sg. Soi*, *Sg. Pekan* and *Sg. Gambang*. The attributes of Dam Water Level and all the four rivers will contribute to the opening and closing the spillway gate. From an interview conducted in *Department of Irrigation and Drainage*, Kuantan, the expert said that *Sg. Pahang* and *Sg. Pekan* are the **most important** attributes and the attributes are twice the value of other attributes. The target for each case is either Open or Close gate.

Table 1

Day	Dam Water Level	Sg. Pahang	Sg. Soi	Sg. Pekan	Sg. Gambang	Gate
1	29.26	11.06	30.40	15.99	23.00	Open
2	28.99	13.09	29.01	17.09	20.99	Close
3	29.50	12.89	20.99	21.99	21.09	Close
4	27.01	10.11	27.89	11.09	19.22	Open

- i. Predict the gate opening for Day 5 using Case-Based Reasoning algorithm, with the following attribute values;

Attribute	Value
Dam Water Level	29.50
Sg. Pahang	12
Sg. Soi	20.00
Sg. Pekan	22
Sg. Gambang	20