**1.1.3 The data**

: Number of jobs to be scheduled

: Processing time of job  on the first machine; 

: Processing time of job  on the second machine; 

**1.1.4. Decision variables**

1 if job  is scheduled in position *j*

 

0 otherwise

: Completion time of job in position *j* on machine *k* , 

By using this notation, the mathematical formulation can be expressed as follow:

**1.1.5. The formulation**



 (1)  
  (2)

  (3)

  (4)

  (5)

  (6)

  (7)

  (8)

  (9)