



1.  $\sum_1^{10} x_i = 10$ .  $x_i$  can take 0, 1 or 2

How many unique solution this equation has? Each sequence of will be treated as a unique solution (ex : 0111111112, 1011111112 are two different solutions).

Solve this using R/Matlab/Excel

2. There are 10 different files in a folder named as **Salary\_YYYYMMDD.csv**. All files contain same columns: Name, Salary. For example file **Salary\_20160101.csv** will contain the salary of the employees for Jan'16, similarly **Salary\_20160229.csv** will contain salary for Feb'16. Read all files from the folder and create one single csv file named **Salary.csv** which will contain the salary information across 10 months for all the employees.( column names will : employee; sal\_jan; sal\_feb;..... )
3. Simulate a Brownian motion for 100 different paths.
4. A stock can move up by 1\$ with probability .4, can go down by 1\$ with probability .3 or can stay at the same price. Simulate the possible prices of the stock after 30 days. Do this using 1000 simulation.
5.  $X = c(list(4,5), c(7,8))$   
 $Y = c(list(4,5), list(7,8))$   
  
Is  $X = Y$ ?
6. How will you calculate the count of NA values in M x N data frame?