5. Suppose patient enter a clinical trial in the order given by the table below. The variables V_1 and V_2 in the table refer to two binary variables that are considered important prognostic factors.

Patient No.	V_1	V_2	simple randomization	stratified randomization
1	1	0		
2	1	1		
3	0	0		
4	1	0		
5	1	0		
6	0	0		
7	1	0		
8	1	1		
9	0	1		
10	0	1		
11	0	1		
12	1	0		
13	1	1		
14	0	0		
15	1	1		
16	0	1		
17	1	0		
18	0	0		
19	1	0		
20	0	1		

(a) The patients are to be assigned to either treatments A or B. Using random numbers fill in the treatment assignments in the previous table using

   (i) simple randomization

   (ii) permuted block randomization within strata using blocks of size 2 or 4 chosen at random with equal probability

Remark: Although you may collaborate with each other on general understanding of this problem, I want everyone to generate their own set of random numbers independently of each other.

(b) For each of the two allocation schemes summarize the balance you achieved

   (i) overall

   (ii) by strata (in combination)

   (iii) by prognostic factor (marginally)