Data input

index	day	Tiffany	Quetiapin	Elki	Fiona	Max	Yolanda	Ngo	Vincent	Alicia	Brian	Ngan	Wilfred	Charis
1	D	0	0	0	0	0	0	0	0	0	0	0	0	0
2	D	0	0	0	0	0	0	0	0	0	0	0	0	0
3	D	0	0	0	0	0	0	0	0	0	0	0	0	0
4	D	0	0	0	0	0	0	0	0	0	0	0	0	0
5	D	1	0	0	0	0	1	0	0	0	0	0	0	0
6	E	1	0	0	0	0	1	0	0	0	0	0	0	0
7	E	1	0	0	0	0	1	0	0	0	1	0	0	0
8	D	1	0	0	0	0	1	0	0	0	1	0	0	0
9	D	1	0	0	0	0	1	0	0	0	1	0	0	0
10	D	1	0	0	0	0	1	0	0	0	1	0	0	0
11	D	1	0	0	0	0	0	0	0	0	1	0	0	0
12	P	0	2	0	0	0	0	0	0	0	1	0	0	0
13	P	0	0	2	0	0	0	0	0	0	0	0	0	0
14	P	0	0	0	2	0	0	0	0	0	0	0	0	0
15	P	0	0	1	0	2	0	0	0	0	0	0	0	0
16	D	0	0	1	0	0	0	0	0	0	0	0	0	0
17	D	0	0	1	0	0	0	0	0	0	0	0	0	0
18	D	0	0	1	0	0	0	0	0	0	0	0	1	0
19	D	0	0	1	0	0	0	0	0	0	0	0	1	0
20	E	0	0	1	0	0	0	0	0	0	0	0	1	0
21	E	0	0	0	0	0	0	0	0	0	0	0	1	0
22	D	0	0	0	0	0	0	0	0	0	0	0	1	0
23	D	0	0	0	0	0	0	0	0	0	0	0	0	0
24	D	0	0	0	0	0	0	0	0	0	0	0	0	0
25	D	0	0	0	0	0	0	0	0	0	0	0	0	0
26	D	0	0	0	0	0	0	0	0	0	0	0	0	0
27	E	0	0	0	0	0	0	0	0	0	0	0	0	0
28	E	0	0	0	0	0	0	0	0	0	0	0	0	0
29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
count	NA	2	3	2	3	2	3	2	1	3	2	3	2	3
wecount	NA	1	1	1	1	1	1	1	1	0	1	1	1	0

First column – index:

- Up to day 32 (algorithm issues) (need to put NA for all the columns if the specific month does not have that day, e.g. all NA for 29 to 32 in Feb)
- count (according to the 1:2:3 rule; could also be adjusted if we want to make some balance, e.g. if a junior trainee was exempted for 1 call, count: 3 -> 2)
- wecount (weekend count; at the end of the rotation some may have more weekend calls and some having less; we can adjust here)
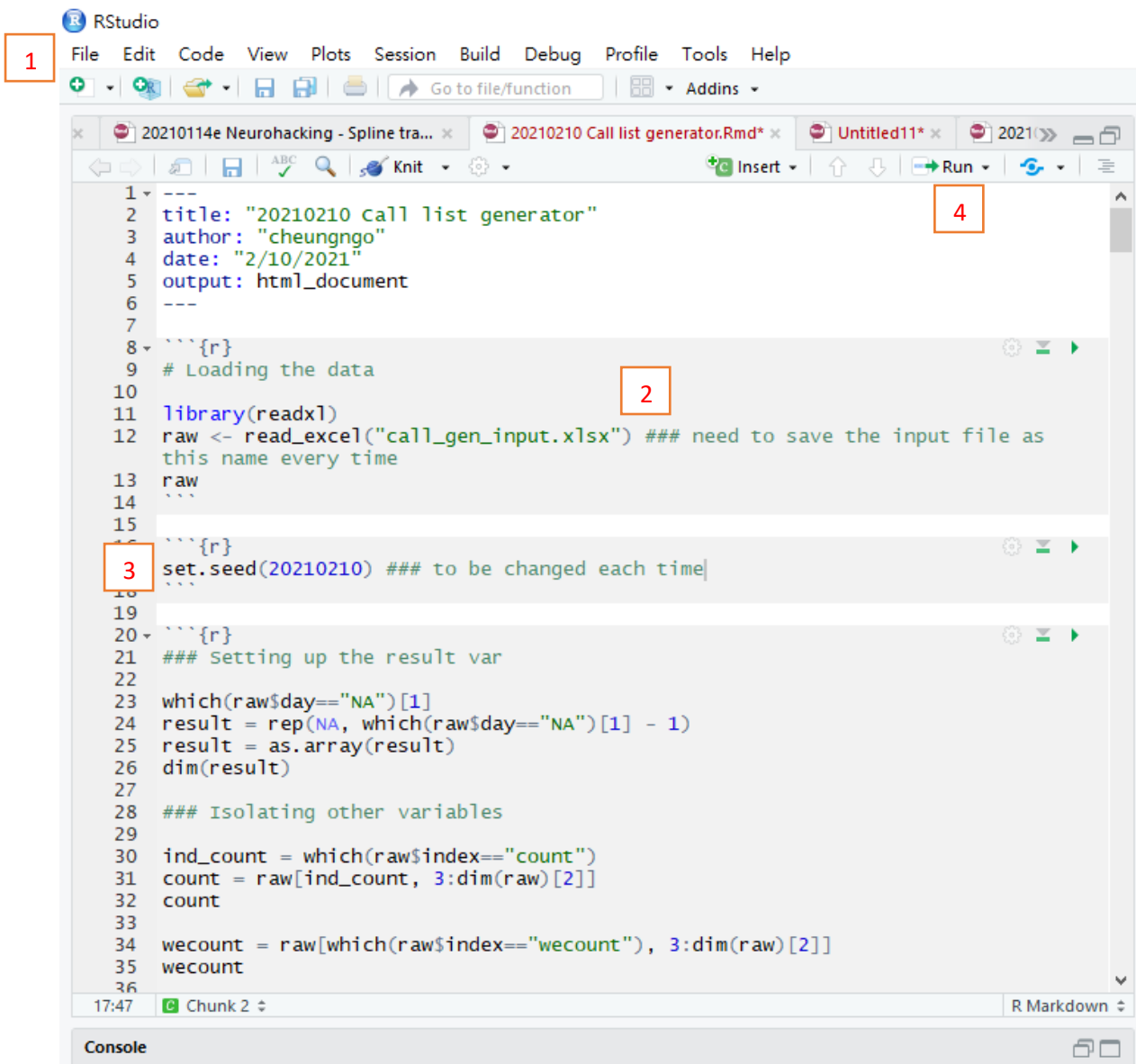
Second column – day:

- "D" for weekday; "E" for weekend; "P" for PH
- R has its calendar package but it does not have the PH data in HK; so we need to specify here; may improve later

Third column through the end:

- "1": request no call, AL, etc
- "2": PH call

Running the program

1. Open the script
2. Input the data according to the previous instruction, and save it as "call_gen_input.xlsx", and put it under the working directory of R (usually being "Documents")
3. set.seed(); input the date in 8 digit format; important to get repeatable (same results in every computer) results
4. run the script (or better "Knit" to get a prettier and more readable html file)
5. Check the working directory ("Documents") for the output file "call_list_result.csv"