

Dear Candidate,

Thank you for taking the KMK technical assessment. Please read this document carefully and follow this instruction. You have one day to complete the test with either R or Python. Depending on the programming language you choose, proper coding environment should be installed prior to taking the test.

- R: R or RStudio
- Python: Spyder or Jupyter

1. You will be given 1 healthcare dataset `sddm.csv`, and a question-and-answer sheet `answersheet.xlsx` that you need to fill your answers by properly manipulating the dataset. Please read very carefully and follow specific instructions of each question. For example, if you are asked to PRINT OUT a number or a row, not only you need to provide the code and comment to express your logic but also fill that number or row in the answer sheet. Otherwise, please provide only code and comment. At the end of the assessment, you are expected to submit all 2 items below into one zip file with your full name as the file name (your `.py` file may not be transferred and opened properly by KMK if you fail to zip it):

- Answer sheet filled with your results and tab name changed to your full name
- Your full R or Python coding file (`.R` or `.py`) with high readability structured based on questions

2. Dataset introduction and dictionary:

Dataset name: `sddm.csv`

Tab name: `sddm`

Each record of this table is a **prescription** of drug D by a physician.

- `phid`: unique identifier for physician (char)
- `age`: physician's age (num)
- `region`: physician's region (char)
- `rxdate`: date of this prescription (date)
- `quantity`: total amount of drug D in this prescription (num)
- `cost`: cost of this prescription (num)

	phid	age	region	rxdate	quantity	cost
1	A001	56	North East	2/3/2017	150	15,005.18
2	A001	56	North East	5/1/2017	30	3,001.36
3	A002	41	North East	6/23/2017	40	8,573.56
4	A003	78	South West	1/31/2017	75	5,468.51
5	A003	78	South West	4/16/2017	15	1,540.23

3. Tips

- 1) Please specify libraries at the beginning of your code.
- 2) Please maintain consistency of capitalization and indentation style for readability.
- 3) You are allowed to google or help function for syntax