

CleaningDataInR

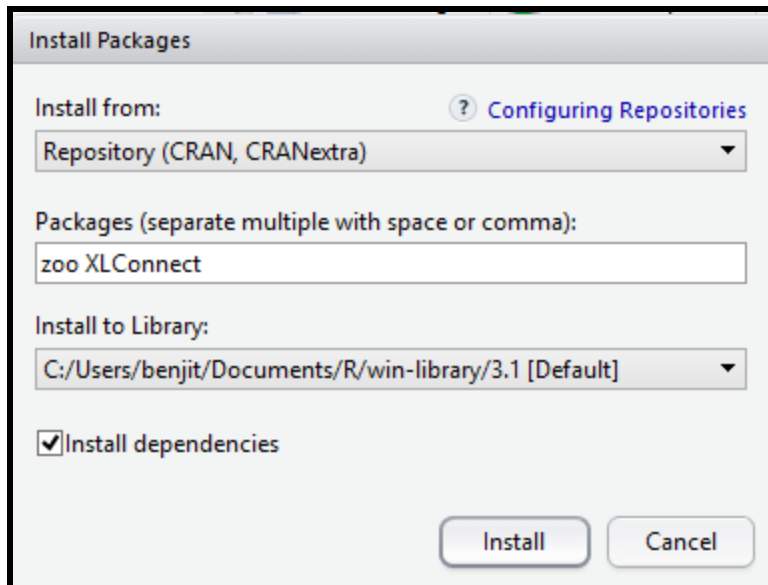
Exercise 2: Reading Excel Files

1. Open up R Studio and ex2.R

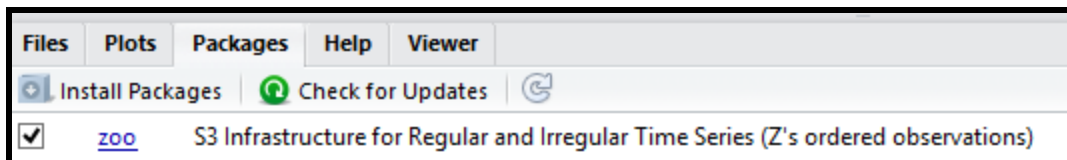


2. This exercise requires the use of the following R packages

- XLConnect
 - to read excel file into R
 - **`install.packages('XLConnect')`**
- Zoo
 - To convert time into Year Quarter
 - **`install.packages('zoo')`**
- Alternatively you can use Rstudio to install



3. Load the library into R
 - **`library(XLConnect)`**
 - **`library(Zoo)`**
 - You can also use Rstudio to load the library by clicking on the checkbox



4. We need to read in the workbook into R and assign it to a variable
 - **`wb = loadWorkbook("C:\\Users\\benjit\\Google Drive\\CleaningDataWithR\\ex2\\MedianResalePrices.xls")`**
5. The excel file has 29 sheets, we will need to read each sheet to extract the record
 - Please view the code with the comments on **ex2.R**

	A	B	C	D	E	F	G		
1	TOWNS	1-ROOM	2-ROOM	3-ROOM	4-ROOM	5-ROOM	EXECUTIVE		
2	ANG MO KIO	-	*	\$318,000	\$418,000	\$590,800	-		
3	BEDOK	-	*	\$300,000	\$397,000	\$512,000	*		
4	BISHAN	-	-	*	\$463,000	\$615,000	*		
5	BUKIT BATOK	-	-	\$293,000	\$382,000	\$548,400	\$577,500		
6	BUKIT MERAH	*	*	\$343,500	\$555,000	\$690,000	-		
7	BUKIT PANJANG	-	-	\$298,000	\$369,000	\$425,000	\$516,000		
8	BUKIT TIMAH								
◀ ▶		2Q2014	1Q2014	4Q2013	3Q2013	2Q2013	1Q2013	4Q2012	3Q2012
READY									

6. Lets create a time series for the resale price in Ang Mo Kio
 - We start from Year 2007 and Quarter 2 based on the spreadsheet
 - The frequency will be 4 since the data is quarterly data
 - **`AMK_TS = ts(data=AngMoKio,start = c(2007,2), frequency = 4)`**
7. We convert the time series to a data frame as we want 2 columns to be written out, that is the date and the prices
 - **`AMK_DF = data.frame(YearQuarter=as.yearqtr(time(AMK_TS),format = "%Y-%m-%d"),AMK5RM=AMK_TS)`**
8. Now will can write out as csv
 - **`write.csv(AMK_DF,"C:\\Users\\benjit\\Google Drive\\CleaningDataWithR\\ex2\\amkresalehousingdata.csv",row.names=FALSE)`**