

# A S S I G N M E N T 1

Due date: Thursday, 8 March 2018

*Put your assignment into my mailbox which is located on level 12, Fong Shu Chuen Building.*

1. Suppose in a restaurant, 5 customers ordered Menu A, 6 Menu B, 6 Menu C, 8 Menu D and 10 Menu E. Use SPSS to draw (i) the Bar chart and (ii) the Pie chart for the data.
2. Open the data file “DataSetI-CityData.sav” from the website of the textbook  
<http://bcs.wiley.com/he-bcs/Books?action=resource&bcsId=10164&itemId=1119148324&resourceId=40533>  
(a link to the site can be found in my course homepage for this course). Find the mean, the median, the 1st quartile and the 3rd quartile of the variable ‘TBone’. Do NOT give the full SPSS output; give only the four values asked.
3. In how many ways can a party of 7 persons arrange themselves
  - (a) in a row of 7 chairs?
  - (b) around a circular table where the orientation (North–South–East–West) does not matter?
4. There are 4 girls – Amy, Betty, Candy and Dorothy – and 2 boys – Eugene and Fred.
  - (a) In how many ways can they sit in a row?
  - (b) In how many ways can they sit in a row if the boys and girls are each to sit together? (That is, all boys are sitting together and all girls are sitting together.)
  - (c) In how many ways can they sit in a row if just girls are to sit together and boys may or may not sit together?
5. There are 3 American, 4 Belgian, 4 Chinese and 2 Deutscher (German). They are all distinguishable. In how many ways can they be seated in a row so that those of the same nationality sit together?
6. A drawer contains nine pairs of socks of different colours. If six socks are taken at random without replacement, what is the probability that there is at least one matching pair among these six socks?