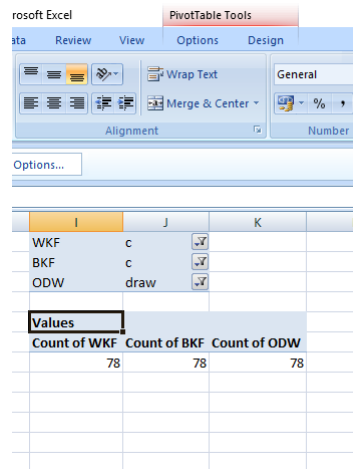


## PRACTICAL -2

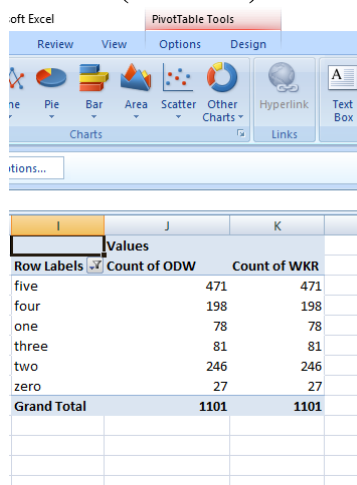
**Aim:** Visit UCI data repository and download king-rook-vs-king chess data (<http://www.ics.uci.edu/~mlearn/databases/chess/king-rook-vs-king>) to answer the following questions using Microsoft Excel Pivot Table and Pivot Chart tool (Give relevant print-outs):

- a) How many times the result was draw when the White king File position was 'c' and the Black King File position was also 'c'?



	WKF	BKF	ODW
Count of WKF	78		
Count of BKF		78	
Count of ODW			78

- b) What was the White King Rank position the highest number of times when the result is a win with moves between zero and five (inclusive)? How many times did this occur?



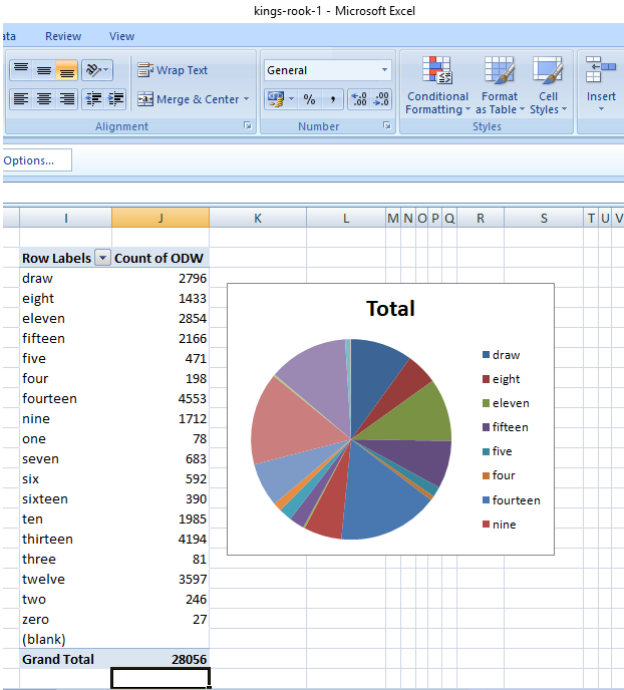
Row Labels	Count of ODW	Count of WKR
five	471	471
four	198	198
one	78	78
three	81	81
two	246	246
zero	27	27
<b>Grand Total</b>	<b>1101</b>	<b>1101</b>

c) Identify a Black King Rank position that required every time more than 5 move for a win.

k-1 - Microsoft Excel

PivotTable Tools			
Options			
Alignment			
Options...			
els			
H	I	J	K
	BKR	(All)	
	Row Labels	Count of BKR	
	draw	2796	
	eight	1433	
	eleven	2854	
	fifteen	2166	
	fourteen	4553	
	nine	1712	
	seven	683	
	six	592	
	sixteen	390	
	ten	1985	
	thirteen	4194	
	twelve	3597	
	Grand Total	26955	

d) Draw a pie chart showing the distribution of different values of result.



e) **Can you identify some positions that lead to win with few moves?**

**Answer:** F7 E4 C4 H5F3