


## Exercise Handout of Data Handling

1. Load file Sample Data For Exercise.xlsx from desktop.
2. In first part of this exercise work on sheet "Exercise Part 1".
3. Select cells from A1 to F7.
4. Click the format as table option from home tab.
5. After applying table to your data filters will be automatically applied.
6. From the last column of Hobby sort ascending while selecting the "Expand the Selection option".
7. Insert a new column after Column B and use the concatenate function to combine the first name and last name fields as full name.
8. Add current date using TODAY function at cell A12
9. Insert a new column after column E
10. In column E all the address contains the keyword Lahore and replace it with Islamabad using SUBSTITUTE formula in new column inserted in previous step. Enter the formula in one cell and drag it down to apply to other cells and the name the column as New Address.
11. Insert a new column after column G.
12. Use the IF formula **=IF(G2>=18,"Adult","Under Age")** to assess the age group in new column created in previous step and name it as Age Group.
13. In column J enter the formula of AND **=AND(H2="Adult",I2="Photography")** to assess the two conditions. First condition is that person should be Adult and the other condition is that the hobby must be Photography. Name the column as valid candidate.
14. In column K enter the formula of OR **=OR(H2="Adult",I2="Photography")** to assess the any one condition. First condition is that person can be Adult and the other condition is that the hobby can be Photography. Name the column as acceptable candidate.
15. Go to sheet 2 with the name of "Exercise Part 2".
16. Work only in the cells highlighted with light blue colour. 
17. In column F insert the sum formula to calculate the total marks.
18. Calculate the average in column G using AVERAGE formula **=AVERAGE(B2:D2)** and copy the formula to all the cells by dragging it down.

19. Generate the Grades automatically in column H using IF formula **=IF(G2>=90,"A+",IF(G2>=80,"A",IF(G2>=70,"B",IF(G2>=60,"C","Fail"))))** and copy the formula to all the cells by dragging it down. Enter this formula carefully as symbols of punctuation is mandatory.
20. Generate the overall comments using nested IF and AND together in a formula. Enter this formula carefully as symbol of punctuation is mandatory **=IF(AND(G2>=50,E2="C"),"Need Improvement",IF(AND(G2>=60,E2="B"),"Good Performance",IF(AND(G2>=70,E2="A"),"Very Good Performance",IF(AND(G2>=80,E2="A+"),"Excellent Performance","Work Hard"))))**. After entering the formula copy it to all other cells by dragging it down.
21. Enter the highest marks obtain in all students using **=MAX(F2:F7)** formula in cell E10.
22. In column H at cell H9 Count the number of each grade from the data using COUNTIF formula **=COUNTIF(\$H\$2:\$H\$7,G9)** use this formula with absolute reference(using \$) to avoid cell reference upgradation when replicate.
23. Select cells from A1 to B7 to create the pie chart.
24. Select cells from A1 to A7 and hold the CTRL button to select other different column to draw pie chart for individual subject progress. Create chart for Math and Urdu on the same sheet.
25. Select cells from A1 to D7 to create the Clustered Column charts.
26. Apply your desired conditional formatting on AVERAGE column G.
27. Enter your name, class and section at the bottom of the sheet.
28. Save your document as Document <<your name>>.xlsx
29. Convert this file in CSV using Save As feature and while saving it save it with your name.
30. Set print area from page layout tab and select the option "fit to one page".
31. Take the printout of the document in landscape mode.