**Payroll System**

In this project we made a monthly payroll system for the employees of an organization. The spreadsheet took hours worked and hourly rate to calculate the base pay, overtime pay and total money.

If formula to evaluate conditions

Absolute and relative cell referencing

**Gradebook**

For employees that have been inducted.

There were four tests that were done. The scores were logged in. Conditional formatting was done to get a visual representation for the distribution. Percentage scores were calculated. Participants scoring less than 50% were highlighted because they needed to be fired. An OR condition was used to evaluate if any employee has scored less than 50%. Finally graphing was done to get a visual representation of the score.

Introduction to conditional formatting.

OR function to evaluate conditions

OR(cond1</>,cond2</>) returns true or false

Basic Charting (Clustered Bar Chart)

**Decision Maker**

We have to pick a job based on different factors. Listed a number of jobs and contributing factors in choosing a job. Each factor was assigned a weight to understand its significance in the decision. Total of the scores was calculated and conditional highlighting was used to identify the top 10% scores.

**Sales Report**

Summarize data.

Split the salesperson name into first and last names. Used if condition to calculate the commission of each salesperson. Used sumif to calculate the sum of items valued less than 50 and greater than 50. Summarized the total sales of each employee for the month using pivot tables and represented the data using a pie chart.

Text-to-column: Split the salesperson column to separate first and last name

If: to calculate the commission of salespeople

Sumif: Sum items satisfying certain criteria

Sort: Sort the whole table according to some values

Filter: Filter data based upon criteria

Pivot tables: Summarize large group of data.

Pie charts:

**Car Database**

Import text files into excel

Formula to split cells (left, right, middle): To extract values from a column and paste them into different fields

VLOOKUP: Defined lookup table to make a table containing abbreviations for make and their full form. Items must be sorted in alphabetical order for them to work correctly.

IF formula: To check if the car is covered under warranty or not

Concatenate formula: To include the color of the car in the car id.

Pivot table: To calculate the total miles driven by each driver

Charts: To display miles driven (bar chart) and to show relation between age and miles

Copy results to a report in Microsoft Word

**Mortgage Calculator**

Calculating monthly payments for a loan using simple mathematical formulas and displaying the results using a bar chart.