































DATA ANALYTICS ROADMAP-






To get into the data analytics field you need to learn four important skills (SQL,Excel,Python,Statistics, Power BI) , so in this document I will be creating a perfect roadmap where you will find the topics you need to know and FREE resources for where you can learn all the concepts.

Let's start with

SQL

The only topics in SQL you need to learn as a fresher in sequence are -

-  Introduction to DBMS
-  CRUD Overview
-  Relational and Non Relational DB
-  Why SQL ?
-  Data types in SQL
-  String Data Types
-  Numerics Data Types
-  Date Time Datatypes
-  DDL
-  DML
-  DCL
-  TCL
-  Primary Keys
-  Surrogate Key
-  Foreign Key
-  Composite Key
-  Operators
-  Wildcards
-  Top/Limit
-  Order By
-  String Function
-  Date Time Functions
-  Mathematical Functions
-  Aggregates and Group By
-  Having
-  Case When Statements
-  Right,Left,Inner Join
-  Full Outer,Self,Cross Join
-  Rank ,Dense Rank,Row Number
-  Partitions

-  Lag Lead
-  Order of Executions of Sql
-  NonEqui Joins
-  CTE
-  ListAgg

Learn all the concepts from the below links in sequence -

Basic Concepts -

<https://youtu.be/hWu07vu-Col>

Advanced Concepts -

https://www.youtube.com/playlist?list=PLbTF1OfX62c3RQ_ZFyNBWVPdz_OWTMLG

Leetcode Questions and Solutions -

<https://www.youtube.com/playlist?list=PLbTF1OfX62c3PHs8pANtRc9dSxu5Skdkp>

Hackerrank Questions and Solutions -
























<https://www.youtube.com/playlist?list=PLbTF1OfX62c3VFYy8aj9e07W7RouhzNMQ>












Portfolio Projects-

https://www.youtube.com/playlist?list=PLbTF1OfX62c1wb8fsf_n1kQGOi2YEM3no

EXCEL

The only topics in EXCEL you need to learn as a fresher in sequence are -

-  Pivot Tables
-  VLOOKUP
-  HLOOKUP
-  XLOOKUP
-  Index Match
-  Operators
-  IF,IFS,IFNA,IFError
-  Count,Countif,Countifs,Counta
-  Sum,Sumif,Sumifs
-  Average,Averageif,Averageifs
-  Percentile,Percentrank
-  Quartile
-  Mean,Median,Mode
-  Round,Power
-  Large,Small
-  Weekday,Weeknum
-  Date,Time,Minute,Hour
-  Yearfrac,Edate,Emonth
-  Networkdays,DATEFormat
-  Conditional Formatting
-  Value,Find,Search
-  Istext,Isnumber,Replace
-  Exact,Proper,Mid

-  Upper, Lower
-  Rept, Clean
-  Concatenate, Substitute
-  Date To Text
-  Max, Min
-  Length, TRIM
-  Left, Right
-  Charts & Dashboarding
-  Data Validation
-  Text to Column
-  Practise Problems

Basic to Advanced Excel Concepts -

https://www.youtube.com/playlist?list=PLbTF1OfX62c21d7qFwH8wNfEDdp_Kdho1

Practise Problems -
























https://www.youtube.com/playlist?list=PLbTF1OfX62c1Wp8dkQZUKI_rq5U4qPdhd

Portfolio Projects -

https://www.youtube.com/playlist?list=PLbTF1OfX62c1wb8fsf_n1kQG0i2YEM3no

PYTHON

The only topics in PYTHON you need to learn as a fresher in sequence are -

-  Python Data Types
-  Indexing and Slicing with Strings
-  Python list
-  Python Dictionary
-  Sets , Tuples
-  Operators in python
-  if elif & else statements
-  For Loops
-  While Loops
-  List Comprehensions
-  Intro to functions
-  def keyword
-  *args & **kwargs
-  lambda function
-  Map & Filter function
-  Pandas
-  Numpy
-  Matplotlib
-  Errors & Exception Handling
-  Regular Expressions in python
-  Web Scraping Python
-  File handling in Python
-  Working with PDFs and Excel

 Interface build with python modules

Learn Python from here-






















https://youtube.com/playlist?list=PLu0W_9lI9agwh1XjRt242xlpHhPT2llg&si=17OUKFof9DhKPU Dx

Learn Pandas-

<https://youtu.be/vmEHCJofslg?si=vMPpQ9Znn67QfAvR>

STATISTICS

The only topics in STATISTICS you need to learn as a fresher in sequence are -

-  Mean, Median, Mode
-  Variance and Standard Deviation
-  Quartiles and Percentiles
-  Bar charts, Histograms, and Pie charts
-  Scatter plots and Box plots
-  Time-series Analysis
-  Outlier Detection and Handling
-  Correlation Analysis
-  Hypothesis Testing
-  Chi-square tests
-  Basic Probability Concepts
-  Conditional Probability
-  Random Sampling
-  Linear Regression
-  T-tests
-  Central Limit Theorem
-  Normal, Binomial Distribution
-  Poisson, Exponential Distribution
-  Confidence Intervals
-  p-values
-  Skewness and Kurtosis

Learn all these concepts from - KHAN Academy

<https://www.khanacademy.org/math/statistics-probability>

POWER BI

The only topics in POWER BI you need to learn as a fresher in sequence are -

Learn all these concepts from here -

<https://youtube.com/playlist?list=PL6Omre3duO-OGTAMuFuDOS8wMuuxmyaiX&si=479VNcyQZEw4Cyzc>

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You tube

[youtube.com/c/AshutoshKumarYT](https://www.youtube.com/c/AshutoshKumarYT)

Resume Template - CAREERCUP.COM/RESUME