

| Business Knowledge | TITLE | CASE STUDY |
|---------------------------|-------------------|--|
| 1 | Walmart | <u>Walmart Finance standardizes on Power BI for reporting and analytics Microsoft Customer Stories</u> |
| 2 | Burger King | <u>Burger King's Secret STRATEGY to compete with McDonald's: Burger Wars Ep 1</u> |
| 3 | IKEA | <u>IKEA Business Case Study: How to Earn 40 Billion\$ Every Year by Selling Furniture? (IKEA Effect)</u> |
| 4 | Amazon vs Blinkit | <u>https://youtu.be/OGs2YsqvWDg?si=OMX1V8LYLvdaNMnI</u> |

| Statistics | TITLE | RESOURCES | |
|------------|--------------------------------------|---|---|
| 1 | Mean, Median, Mode | https://youtu.be/YAOoKUT74TI?si=XduHNQ2gx4y-1SqR | |
| 2 | Percentiles & Quartiles | https://youtu.be/SZ07hyMEOAU?si=czwNHDuw8TuSwYEn https://www.khanacademy.org/math/pre-algebra/xb4832e56:percentages/xb4832e56:intro-to-percents | |
| 3 | Range, Variance & Standard deviation | https://youtu.be/ovq5InlpF2U?si=I5Y584KUvgv1-tjM | |
| 4 | Normalization & Standardisation | https://youtu.be/POrcNP2ZhC8?si=L37k0JmyMa8nJGPb | QUIZES |
| 5 | Covariance | https://youtu.be/qtaqvPAeEJY?si=fkuLI8pSdPddFgHE | Statistics and Probability Khan Academy |
| 6 | Correlation | https://youtu.be/xZ_z8KWkhXE?si=JE-ScIbDz8h_ksdd | https://www.geeksforgeeks.org/quizzes/statistics-quiz-trivia-mcq-questions-solution/ |
| 7 | P value & hypothesis testing | https://youtu.be/xdZSWsKk5P0?si=xHfAzJtdM2HaKAnt | |

| Excel | Title | Resources | Assignment |
|-------|---|---|--|
| 1 | Excel | https://www.w3schools.com/excel/excel_introduction.php | Create your own timetable from mon to friday |
| 2 | Basics | https://youtu.be/0tdlR1rBwkM?si=luRkZnz2oWTdlzzL | |
| 3 | Excel Formatting | https://www.youtube.com/watch?v=E6el9uUjphQ | |
| 4 | Excel Sorting | https://youtu.be/m97Rbqs6ico?si=QH_vYlsmNp9hs6At | |
| 5 | Filtering | https://youtu.be/4mZNhE1mzQ?si=KKYOE98aVc0tuwQB | |
| 6 | Charts | https://www.youtube.com/watch?v=DAU0qqh_I-A | |
| 7 | Formulas | https://www.youtube.com/watch?v=y1126PQ5zRU https://youtu.be/ShBTJrdioLo?si=ygRIQL2A01bMwC89 | Free Practice Excel templates https://www.vertex42.com/ExcelTemplates/family-budget-planner.html |
| 8 | Combining data from 2 tables (VLOOKUP) | https://youtu.be/8rtvDQVQaA0?si=f_rRzChTYqkrxB4C | |
| 9 | Combining data from 2 tables (INDEXMATCH) | https://www.youtube.com/watch?v=kly0uPIM4IU | |
| 10 | Combining data from 2 tables (XLOOKUP) | https://youtu.be/4c0CLUER6nw?si=uFpmzQWxK1WPtuiz | |
| 11 | Pivot tables | https://youtu.be/zuSNd1ZMfBI?si=0z0Q2Gve9r-Eel7n | Sample: https://chandoo.org/wp/wp-content/upl |
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| | Power Pivot & DAX | https://youtu.be/PQ5IALdFHCu?si=Zk2LgO8wnXDreOaD | |

| SQL | TITLE | | RESOURCES | |
|-----|-------------------------|--------------------|---|---|
| 1 | | MYSQL Installation | https://youtu.be/wgRwITQHszU?si=Zc44ZHpdupoAzIDG | SQL for beginners: https://www.youtube.com/watch?v=Rm0xH2Vpf0Q |
| 2 | Fetch data | SQL Select | https://www.w3schools.com/sql/sql_select.asp | https://youtu.be/yfWcZ6eot4g?si=WA0sTHCMj6vhskLo |
| | | SQL Distinct | https://www.w3schools.com/sql/sql_distinct.asp | |
| | | SQL Like | https://www.w3schools.com/sql/sql_like.asp | |
| | | SQL Where | https://www.w3schools.com/sql/sql_where.asp | SQL Normalization: https://www.youtube.com/watch?v=dBO8-cNyY6c |
| 3 | Data location | Between | https://www.w3schools.com/sql/sql_between.asp | Primary key: https://www.w3schools.com/sql/sql_primarykey.asp |
| | | In | https://www.w3schools.com/sql/sql_in.asp | Foreign Key: https://www.w3schools.com/sql/sql_foreignkey.asp |
| | | Order By | https://www.w3schools.com/sql/sql_orderby.asp | |
| | | Offset & Limit | https://www.datacamp.com/tutorial/sql-offset | |
| 4 | Aggregate function | Min & Max | https://www.w3schools.com/sql/sql_min_max.asp | |
| | | Average | https://www.w3schools.com/sql/sql_avg.asp | Stored procedures: https://youtu.be/vJQsW41S16E?si=Sf-faumXC_HWxlrW |
| | | group by | https://www.w3schools.com/sql/sql_groupby.asp | |
| | | Having clause | https://www.w3schools.com/sql/sql_having.asp | Index in SQL |
| 5 | conditions | SQL Case | https://www.w3schools.com/sql/sql_case.asp | https://youtu.be/FphutznHY_E?si=QCNO7xUt9hypAnos |
| 6 | comparisons | Any & all | https://www.w3schools.com/sql/sql_any_all.asp | |
| 7 | Window functions | | https://www.youtube.com/watch?v=rlcB4zMYMas | |
| 8 | Joins | Inner | https://www.w3schools.com/sql/sql_join_inner.asp | Interview questions: |
| | | Left | https://www.w3schools.com/sql/sql_join_left.asp | https://www.datacamp.com/blog/top-sql-interview-questions-and-answers-for-beginners-and-intermediate-practitioners |
| | | Right | https://www.w3schools.com/sql/sql_join_right.asp | |
| | | Full | https://www.w3schools.com/sql/sql_join_full.asp | SQL Coding Practice |
| | | Cross | https://www.w3schools.com/mysql/mysql_join_cross.asp | DataLemur - Ace the SQL & Data Science Interview |
| 9 | SQL data types | | https://www.w3schools.com/sql/sql_datatypes.asp | |
| 10 | Sub query | | https://www.simplilearn.com/tutorials/sql-tutorial/sql-subquery#conclusion | |
| | Corelated subquery | | https://www.youtube.com/watch?v=Oh6zbj9S7L4 | |
| 11 | Common Table Expression | CTE | https://www.youtube.com/watch?v=plpylD5jBEg | |

| Python | TITLE | RESOURCES | PYTHON SETUP | https://youtu.be/W-Bi6AjEQfM |
|--------|-----------------------------------|---|----------------------------|---|
| 1 | Basic data types + operators | https://youtu.be/PTTd1jKx8_o?si=IA21SbK_jTjmfDGU | | |
| 2 | Loops & if-else | https://youtu.be/zv3MVNy3l4E?si=nKs52v1BNBrte_0S | | |
| 3 | Data Structures | List - https://youtu.be/N55AxC6REU?si=CECji4YcidL9-jKE Set, tuple, dictionary - https://youtu.be/l0n6ABPSyQs?si=8-twgHjj6RsqftY | PYTHON INTERVIEW QUESTIONS | https://www.hackerrank.com/blog/python-interview-questions-developers-should-know/ |
| 4 | Functions | https://youtu.be/kY3DdsBs6Wk?si=C7bnaZQgUe1nWsYG | | https://www.hackerrank.com/domains/python/py-introduction/difficulty/all/page/1 |
| 5 | File Handling | https://youtu.be/-XQdyv8chuo?si=Xyx8q7Zp-HNkuv5k | | https://www.hackerearth.com/practice/problems/?limit=20&offset=0 |
| 6 | Numpy | https://youtu.be/y1cptvUbtY?si=TBpY9oTGN3wIzdBP | | |
| 7 | Pandas | https://youtu.be/3hTOHzo4Jf8?si=xJ0yeiWcmvERS-s0 | API Framework | FastAPI - https://youtu.be/Wr1JjhTt1Xg?si=2O4Q5wuOAzFhHLTK |
| 8 | Data Visualization | Matplotlib - https://youtu.be/jv_2CXx630M?si=ZHmdwJaW6VKuQP_t Seaborn - https://youtu.be/2bLESc8KOgw?si=DU4c6mk4YNVs1xY9 | | StreamLit https://youtu.be/D0D4Pa22iG0?si=g08Mdi0yJ7ZJnim4 |
| 9 | OOPS | https://youtu.be/R9Yia3aUool?si=guDjGPblX5ls_XDC | | |
| 10 | Multi-threading/ Multi-processing | https://youtu.be/rDro-he__Q?si=QWQ8RjG7cKdR-dGt | | |

| PowerBi | TITLE | RESOURCES | blog to follow https://chandoo.org/wp/power-query-tutorial/ |
|---------|---|---|--|
| 1 | PowerBI into | https://youtu.be/al4OfLlOI2w?si=JeoaiRSSg_MBBzt_ | |
| 2 | Power Query | https://www.youtube.com/watch?v=MMdcczmULrU | interview questions: https://www.youtube.com/watch?v=aZihsRsEYTE |
| 3 | OLTP vs OLAP | https://youtu.be/oF_2uD7DvQ?si=85-oJRAcSzVUx90S | |
| 4 | Data Modelling- star schema - fact vs dimension table | https://www.youtube.com/watch?v=4ePNrdxWtY0 | |
| 5 | Data transformation | https://www.youtube.com/watch?v=xYM-UwiBvOE&list=PL5tWfOTy8mUIH6eclgLEf8fvoi16qURWX&index=6 | |
| 6 | Custom & calculated columns | https://www.youtube.com/watch?v=Oe8RH5VccC8&list=PL5tWfOTy8mUIH6eclgLEf8fvoi16qURWX&index=34 | DAX Studio: https://www.youtube.com/watch?v=q7-IYTg6B0w |
| 7 | Data visualization-charts | https://www.youtube.com/watch?v=5jrsrSDEMxE | |
| 8 | DAX | https://www.youtube.com/watch?v=ID7TvkoQ6rY | |
| 9 | Advanced data Transformations - M Language | https://www.youtube.com/watch?v=i6ywwi-Tb8g&list=PLVeRI2bVfScvZUTjxH_jccL0Btb6f2m0D | Report sharing: https://youtu.be/fmyuQ2Q1HN4?si=U_TJ0P4d_U4pUu7h |
| 10 | Slicer & filter | https://www.youtube.com/watch?v=vmYrUoUalio | Refresh reports: https://youtu.be/kdaolMKsSOA?si=lx_IZEQByuG0EqbO |
| 11 | Bookmarks | https://youtu.be/xCMqWEvSkAs?si=ageWdlHKg8PEYPoL | |
| 12 | Tooltip | https://youtu.be/npaQ42K1sTs?si=fFbkSKXNy2AjaRmN | |
| 13 | Toggle button | https://youtu.be/5QMpc5fUV2l?si=CveUCPqXF6EDL5st | |

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| End-to-End Resume projects Playlist | https://www.youtube.com/playlist?list=PLeo1K3hjS3uva8pk1FI3iK9kCOKQdz1I9 | | | | |
| Resume Tips | https://www.youtube.com/watch?v=buQSI8NLOmw | | | | |
| ATS Friendly Resume | https://www.jobscan.co/ | https://resumeworded.com/ | https://www.kickresume.com/en/ | https://www.overleaf.com/ | https://zety.com/ |
| How to create Portfolio Website? | https://startbootstrap.com/guides/how-to-create-a-website-with-github-pages#google_vignette | | | | |
| Sample Portfolio websites | https://codebasics.io/portfolio/Puranjoy-Patra | | | | |
| How to use chatGPT as a data analyst | https://storm-margin-1aa.notion.site/4-Technical-areas-where-you-can-leverage-AI-as-seen-in-the-session-9a9ef08e90214c4fbe59074d552d4bca | | | | |