



For

Data analyst

Crack the data analyst internship. *From any branch.*

What analysts do, what the interviews test, and a 4-month plan. From any branch.

Made with an engineer who **works with data at Google** and teaches at **NYC.**





Before you follow a plan, you should know who made it.

Made with an engineer
who works with data at
Google *and teaches at NYC.*



Abhishek

Engineering Analyst, Google

Earlier a senior data scientist at Optum. Teaches Data Science at NYC.

He speaks for himself, not for Google.



Our students are already *doing this plan.*

Live classes, five days a week, with an engineer from Google.



WEEKS 1-7

SQL on real business data

EVERY
FRIDAY

Case days

WEEK 17

A dashboard you defend



Students our team *has* *placed.*

From the team behind NYC, at Sheryians Coding School.

1,200+

students placed

38,000+

students taught, offline and
online



Rishika Jain

Cisco

₹17 LPA



Mansi Patel

Airtel

₹15 LPA



Anuj Parashar

SDE, Care Health Insurance

₹22 LPA



Kushagra Patidar

SDE 1, Amazon

₹47 LPA



Now, let's start *the plan.*

Eight short sections. Read them in order.

- 01 What a data analyst does
- 02 Your 4-month plan
- 03 SQL
- 04 Excel, statistics and dashboards
- 05 The case round
- 06 The 2 projects to build
- 07 Your week
- 08 7 mistakes to avoid

What a data analyst *actually* does.



STEP 1

Ask

Turn a vague question into a clear one.

THE QUESTION YOU GET

Why are sales down?

THE CLEAR QUESTION YOU ANSWER

Which city and product fell, and since when?



STEP 2

Answer

Pull the data with SQL. Fix duplicates, missing values and wrong dates.



STEP 3

Explain

Make a dashboard or a 5-slide story, with one recommendation people can act on.

The 4 interview rounds *most companies use.*

1

Online test

SQL

Excel

Aptitude: maths and logic

Sometimes basic Python

2

SQL interview

You write queries live.

Joins

GROUP BY

Window functions

3

Case round

A business problem. Talk through how you would find the answer.

4

Project and HR

Walk through your dashboard and why you chose those charts.

Rounds vary by company. Service and analytics firms often add an aptitude test. Check with each company.

Your 4-month *plan.*

2 hours a day on weekdays. 3 hours on weekends.

1

Excel and SQL basics

Pivot tables, lookups, charts. SELECT, WHERE, GROUP BY, JOINS.

50 SQL problems

2

SQL in depth, and Python

Window functions, CTEs, subqueries. pandas for cleaning data.

50 more SQL problems

3

Statistics and dashboards

Averages, spread, distributions, A/B tests.

1 Power BI or Tableau dashboard

4

Projects, then apply

Two portfolio projects, a one-page résumé, case-round practice.

10 applications a week

By the end of month 4

100

SQL problems, easy to hard

2

portfolio projects with a written story

1

dashboard you can walk through in 2 minutes



We teach all of this, live.

Talk to an advisor at notyourcollege.com

SQL decides *most* interviews.

1

MONTH 1

The basics



LEARN

SELECT, WHERE, ORDER BY

GROUP BY and HAVING

INNER and LEFT JOIN

CASE WHEN



SOLVE

50 SQL problems.

2

MONTH 2

Interview level



LEARN

Window functions: ROW_NUMBER, RANK, LAG

Running totals

Moving averages

CTEs and subqueries

Dates: month-on-month growth

Handling NULLs



SOLVE

50 more SQL problems, up to hard.

9 questions that keep coming up

- 1 Top 3 products per city
- 2 Month-on-month growth
- 3 Second highest salary
- 4 Customers who bought twice
- 5 Running total of sales
- 6 Find duplicate rows
- 7 Users active 3 days in a row
- 8 Retention by signup month
- 9 Average order value by segment

The other 3 skills: *enough, not everything.*

3

BESIDES SQL

Excel, statistics and dashboards



EXCEL · MONTH 1

Pivot tables

XLOOKUP or VLOOKUP

Conditional formatting

Charts people can read



STATISTICS · MONTH 3

Mean, median and spread

Distributions and outliers

Correlation is not causation

A/B tests: what a p-value means

An A/B test shows two versions to two groups of users, then compares the results.



DASHBOARDS · MONTH 3

One tool: Power BI or Tableau

3 to 5 charts, not 15

A title that states the finding

Filters people actually use

A dashboard that follows these rules

Sales fell 18% after March

City ▾

Product ▾

Month ▾

**-18%**

A title with the finding, 3 charts and 3 filters. Example only.

The case round, *step by step.*

They are not checking if you know the answer.

They are checking how you get to one. Think out loud.

1 Clarify the goal

Sales are down.

Down how much, since when, compared to what?

2 Break it into parts

Sales = orders × order value

Which one fell? Which city, product or channel?

3 Say what data you would pull

Name the tables and the query. Show you can get the answer, not guess it.

4 Give a likely answer and how to check it

I would check whether a competitor launched in those two cities.



End with one recommendation

What should the team do on Monday?



At NYC: every Friday is a case day. You work on a business case, debug your analysis or review it.

The 2 projects *to build*.

1

PROJECT 1

Retail sales dashboard



DATA

A public sales dataset, from Kaggle or a government data portal.



QUESTIONS

Which products and cities grew or fell, and why?



BUILD

SQL for the numbers

Power BI or Tableau for the dashboard



SHOW IT

A 2-minute video walking through it.

2

PROJECT 2

Customer retention analysis



QUESTIONS

Who comes back, who leaves, and after how long?



BUILD

A cohort table by signup month. A cohort is the group of customers who signed up in the same month.



RESULT

One recommendation, with a number attached.



SHOW IT

Written up as a one-page case study.

Every project needs a story, not just charts

1

The question

2

The data

3

What you found

4

What you would do

Recruiters read the story before they look at the charts.



At NYC: the final case in week 17 is a dashboard you defend: messy data, a dashboard and a recommendation, in front of mentors.



Your week, *day by day.*

MON
SQL

TUE
SQL

WED
Stats

THU
Python

FRI
Test

SAT
Build

SUN
Case

MON **10 SQL problems**
30 min of Excel

TUE **SQL: window functions**
Redo yesterday's mistakes

WED **One statistics topic**
Apply it to your dataset

THU **Python: cleaning data with pandas**
30 min on the dashboard

FRI **Timed test: 5 SQL questions, 30 min**
No AI

SAT **3-hour project session**
Publish an update

SUN **Case-round practice**
Plan next week

Where analyst internships are

1 **Product companies**

2 **Startups**

3 **Analytics firms**

4 **Consulting firms**

5 **Banks and fintech**

6 **E-commerce**

7 **Service companies**

8 **Market research firms**

7 mistakes that *get* students rejected.

✗ ~~1. Python before SQL~~

✓ Interviews test SQL first, so learn it first.

✗ ~~2. Dashboards with 15 charts~~

✓ Three charts that answer one question are better than fifteen that answer none.

✗ ~~3. Chart titles with no finding~~

✓ “Sales by month” says nothing. Write the finding: “Sales fell 18% after March”.

✗ ~~4. Only Kaggle notebooks~~

✓ Pick a business question and answer it. That is the job.

✗ ~~5. Skipping statistics~~

✓ You will be asked what an average hides and what an A/B test proves.

✗ ~~6. Never practising the case round out loud~~

✓ Say it to a friend, not just in your head.

✗ ~~7. Thinking only CSE students can do this~~

✓ Analyst teams hire ECE, mechanical, commerce and BSc students. SQL and a clear story matter more than your branch.

We teach SQL, statistics and dashboards, *live*.

● ● ● nyc · course

Covers this plan



WE TEACH THIS

Data Analytics + GenAI

Data Analytics + GenAI: SQL, Python, statistics and dashboards, live. Retail and retention projects reviewed by engineers, with AI-assisted analytics built in.

-  Live classes
-  Engineer reviews
-  For: **Data analyst intern**



Talk to an advisor

See the course → notyourcollege.com



Guide by the NYC team, 2026. Rounds and employers described are general patterns, not a specific company process. NYC does not guarantee employment or selection.