**Purpose**

You’ll build a **portfolio piece** that shows you can clean up real-world data, run SQL queries, use Python for analysis, and visualise actionable insights. That shows a small company: “Hey, I can do data work now.”

**Key Steps & Tasks**

1. **Data gathering**
   * Download data from Office for National Statistics / HM Land Registry for Manchester house prices. [Office for National Statistics+2Office for National Statistics+2](https://www.ons.gov.uk/visualisations/housingpriceslocal/E08000003/?utm_source=chatgpt.com" \t "_blank)
   * Grab breakdowns by property type (detached, semi, terraced, flats) if available. [Local House Prices+1](https://www.localhouseprices.co.uk/prices/manchester/flat?utm_source=chatgpt.com" \t "_blank)
   * (Optional) Get district/postcode data for the city to refine your analysis.
2. **Data storage & SQL**
   * Create SQL tables: e.g. properties, sales, property\_type, district.
   * Load the cleaned dataset into the tables.
   * Run queries like:
     + “Average sale price by year and by property type”
     + “Which district had the highest growth in last 5 years?”
     + “Flats vs houses: which changed more in price since 2020?”
3. **Python + analysis**
   * Use pandas to clean data (nulls, inconsistent types, date parsing).
   * Run analytics: trend lines, growth rates, compare property types.
   * Use matplotlib/Seaborn or Plotly for charts:
     + Line chart of price over time.
     + Bar chart of property type differences.
     + Map or heat-map of Manchester districts if you can.
   * Interpret results: write 2–3 key insights (e.g., “Flats in Manchester have grown slower than terraced houses” or “District X had a price drop in 2024”).
4. **Dashboard / presentation**
   * Use a simple dashboard tool (Streamlit, Dash, or even Power BI/Google Data Studio) to show interactive visuals.
   * Provide a “download the CSV” link or GitHub repo link.
   * In your README or presentation: explain problem, data sources, what you did, what you found, why it matters.
5. **Storytelling & business tie-in**
   * Because you’ve got journalism background, emphasise: “Here’s a story about Manchester’s housing market, illustrated with data.”
   * Highlight potential business value: e.g., small estate agents, landlords, local councils might use this insight; you’re showing you can extract value.
   * One slide or section: “If I were working for you, here’s how you could use this dashboard…” (and tailor to each target company below).
6. **Showcase & outreach**
   * Host the project on GitHub, include screenshots in LinkedIn post.
   * When applying to a small company, attach a link: “Here’s a quick project I did on Manchester house prices — I’d love to help you turn your data into insights like this.”
   * Use the project as a conversation piece in interviews.