# AI Hackathon Lab Prerequisites

1. Bring your laptop
2. Install Visual Studio Code - [Download Visual Studio Code - Mac, Linux, Windows](https://code.visualstudio.com/download)
3. Python Interpreter - [Download Python | Python.org](https://www.python.org/downloads/)
4. Install Azure Data Studio - [Azure Data Studio | Microsoft Azure](https://azure.microsoft.com/en-us/products/data-studio/?msockid=1b0729bacfed6bad170b3b91cedf6acf)
5. Create an Azure Open AI service - [How-to: Create and deploy an Azure OpenAI Service resource - Azure OpenAI | Microsoft Learn](https://learn.microsoft.com/en-us/azure/ai-services/openai/how-to/create-resource?pivots=web-portal)
6. Install the following Visual Studio Extensions
   1. [Prompt flow for VS Code - Visual Studio Marketplace](https://marketplace.visualstudio.com/items?itemName=prompt-flow.prompt-flow)
7. Create a free SQL instance with Sample Adventure works database using below links
   1. [Try for free (preview) - Azure SQL Database | Microsoft Learn](https://learn.microsoft.com/en-us/azure/azure-sql/database/free-offer?view=azuresql)
   2. [AdventureWorks sample databases - SQL Server | Microsoft Learn](https://learn.microsoft.com/en-us/sql/samples/adventureworks-install-configure?view=sql-server-ver16&tabs=ssms#deploy-new-sample-database)
8. Create Azure Resources (Optional)
   1. Azure AI Search (Standard Tier) - [Quickstart: Vectorize text and images by using the Azure portal - Azure AI Search | Microsoft Learn](https://learn.microsoft.com/en-us/azure/search/search-get-started-portal-import-vectors?tabs=sample-data-storage%2Cmodel-aoai%2Cconnect-data-storage)
   2. Azure OpenAI - [Quickstart - Get started using GPT-35-Turbo and GPT-4 with Azure OpenAI Service - Azure OpenAI Service | Microsoft Learn](https://learn.microsoft.com/en-us/azure/ai-services/openai/chatgpt-quickstart?tabs=command-line%2Cjavascript-keyless%2Ctypescript-keyless%2Cpython-new&pivots=programming-language-studio)
   3. Azure AI Studio - [Create a project and use the chat playground in Azure AI Studio - Azure AI Studio | Microsoft Learn](https://learn.microsoft.com/en-us/azure/ai-studio/quickstarts/get-started-playground)
9. Install Miniconda ([Miniconda — Anaconda documentation](https://docs.anaconda.com/miniconda/))
10. Install the Azure Functions Core Tools: <https://go.microsoft.com/fwlink/?linkid=2174087>
11. Install Azure Developer CLI: Install winget install microsoft.azd (Restart) or winget upgrade Microsoft.Azd
12. Install Powershell 7: [Installing PowerShell on Windows - PowerShell | Microsoft Learn](https://learn.microsoft.com/en-us/powershell/scripting/install/installing-powershell-on-windows?view=powershell-7.4#install-powershell-using-winget-recommended)

PS: Make sure to add the environment variable while installing the packages.