

01_LLM_Intro

February 28, 2024

1 01 Intro to Langchain and LLM

```
[15]: import os
      os.environ["OPENAI_API_KEY"] = "**key**"
```

1.0.1 Proprietary LLM from Open AI

```
[7]: # import Langchain-openAI integration package

      from langchain_openai import OpenAI
```

```
[8]: # Instantiate a language model object

      llm = OpenAI(model_name="gpt-3.5-turbo-instruct")
```

```
[9]: our_query = "What is the main programming language in Data Science?"

      response = llm.invoke(our_query)

      print(response)
```

The main programming language in data science is Python.

1.0.2 Open-source LLM hosted on HuggingFace

```
[17]: os.environ["HUGGINGFACEHUB_API_TOKEN"] = "**key**"
```

```
[20]: # import HuggingFace Endpoint package from langchain llms module

      from langchain.llms import HuggingFaceEndpoint

      # instantiate a language model

      llm = HuggingFaceEndpoint(repo_id = "google/flan-t5-xxl")

      # our query
```

```
our_query = "What is the main programming language in Data Science?"  
  
response = llm.invoke(our_query)
```

Token has not been saved to git credential helper. Pass
`add_to_git_credential=True` if you want to set the git credential as well.
Token is valid (permission: read).
Your token has been saved to C:\Users\abhirav\.cache\huggingface\token
Login successful

```
[21]: # print response  
print(response)
```

Python