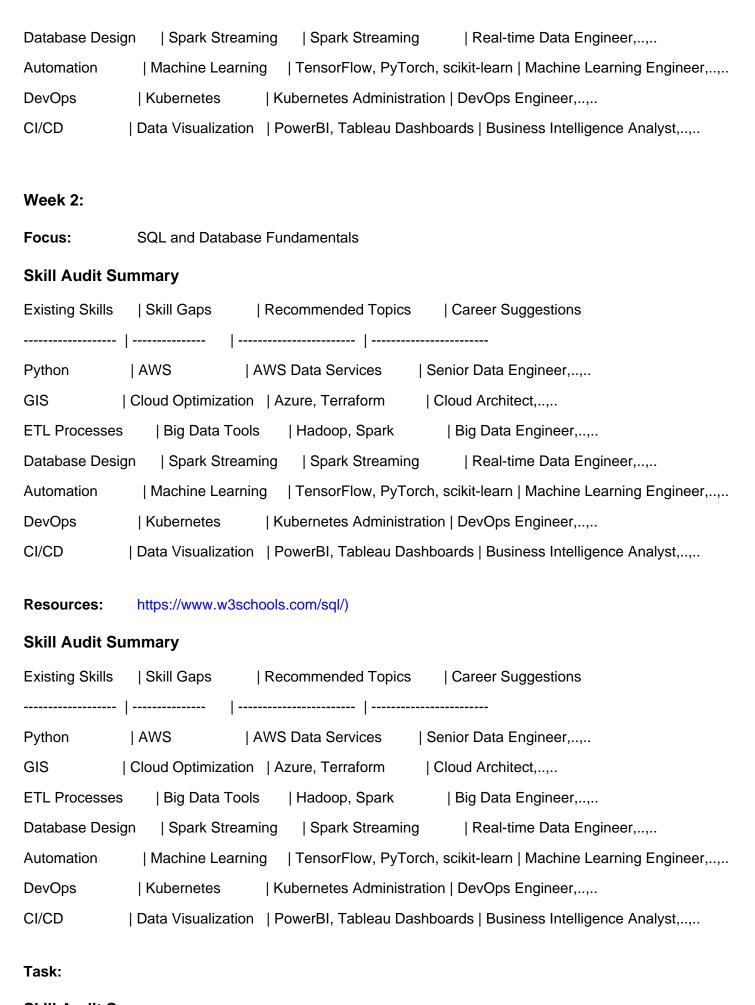
## Week 1: Focus: Introduction to Data Engineering and Python Basics **Skill Audit Summary** Existing Skills | Skill Gaps | Recommended Topics | Career Suggestions ----- | ------ | -------Python | AWS | AWS Data Services | Senior Data Engineer,..,.. GIS | Cloud Optimization | Azure, Terraform | Cloud Architect,..,.. | Big Data Tools | Hadoop, Spark | Big Data Engineer,..... **ETL Processes** | Spark Streaming | Spark Streaming | Real-time Data Engineer,..... Database Design | Machine Learning | TensorFlow, PyTorch, scikit-learn | Machine Learning Engineer,..,.. Automation DevOps | Kubernetes | Kubernetes Administration | DevOps Engineer,..,.. CI/CD | Data Visualization | PowerBI, Tableau Dashboards | Business Intelligence Analyst..... https://www.coursera.org/learn/python) **Resources: Skill Audit Summary** Existing Skills | Skill Gaps | Recommended Topics | Career Suggestions ------ | ------- | -------AWS Data Services | Senior Data Engineer,..... Pvthon **GIS** | Cloud Optimization | Azure, Terraform | Cloud Architect,..... | Big Data Tools | Hadoop, Spark | Big Data Engineer,..,.. **ETL Processes** | Spark Streaming | Spark Streaming | Real-time Data Engineer,..... Database Design | Machine Learning | TensorFlow, PyTorch, scikit-learn | Machine Learning Engineer,..... Automation DevOps | Kubernetes | Kubernetes Administration | DevOps Engineer,..,.. CI/CD Data Visualization | PowerBI, Tableau Dashboards | Business Intelligence Analyst,.... Task: **Skill Audit Summary**

Existing Skills	Skill Gaps	Recommended Topics		Career Suggestions	
Python	AWS	AWS Data Se	ervices	Senior Data Engineer,,	
GIS	Cloud Optimiza	tion   Azure, Te	raform	Cloud Architect,,	
FTI Processes	l Rig Data T	ools   Hadoo	n Snark	l Big Data Engineer	



## **Skill Audit Summary**

	Skill Gaps   Recommended Topics   Career Suggestions
	AWS   AWS Data Services   Senior Data Engineer,,
GIS	Cloud Optimization   Azure, Terraform   Cloud Architect,,
ETL Processes	Big Data Tools   Hadoop, Spark   Big Data Engineer,,
Database Desig	n   Spark Streaming   Spark Streaming   Real-time Data Engineer,,
Automation	Machine Learning   TensorFlow, PyTorch, scikit-learn   Machine Learning Engineer,,
DevOps	Kubernetes   Kubernetes Administration   DevOps Engineer,,
CI/CD	Data Visualization   PowerBI, Tableau Dashboards   Business Intelligence Analyst,,
Week 3:	
Focus:	Introduction to Cloud Platforms (Google Cloud Platform)
Skill Audit Sui	mmary
Existing Skills	Skill Gaps   Recommended Topics   Career Suggestions
Python	AWS   AWS Data Services   Senior Data Engineer,,
GIS	Cloud Optimization   Azure, Terraform   Cloud Architect,,
ETL Processes	Big Data Tools   Hadoop, Spark   Big Data Engineer,,
Database Design	n   Spark Streaming   Spark Streaming   Real-time Data Engineer,,
Automation	Machine Learning   TensorFlow, PyTorch, scikit-learn   Machine Learning Engineer,,
DevOps	Kubernetes   Kubernetes Administration   DevOps Engineer,,
CI/CD	Data Visualization   PowerBI, Tableau Dashboards   Business Intelligence Analyst,,
Resources:	https://www.coursera.org/learn/cloud-architecture-google)
https://www.coui	rsera.org/learn/cloud-data-analytics-google)
Skill Audit Sui	mmary
•	Skill Gaps   Recommended Topics   Career Suggestions
	AWS   AWS Data Services   Senior Data Engineer,,
•	Cloud Optimization   Azure, Terraform   Cloud Architect,
ETL Processes	Big Data Tools   Hadoop, Spark   Big Data Engineer,,
Database Design	n   Spark Streaming   Spark Streaming   Real-time Data Engineer,,

Automation   Machine Learning   TensorFlow, PyTorch, scikit-learn   Machine Learning Engineer,,
DevOps   Kubernetes   Kubernetes Administration   DevOps Engineer,,
CI/CD   Data Visualization   PowerBI, Tableau Dashboards   Business Intelligence Analyst,,
Task:
Skill Audit Summary
Existing Skills   Skill Gaps   Recommended Topics   Career Suggestions
Python   AWS   AWS Data Services   Senior Data Engineer,,
GIS   Cloud Optimization   Azure, Terraform   Cloud Architect,,
ETL Processes   Big Data Tools   Hadoop, Spark   Big Data Engineer,,
Database Design   Spark Streaming   Spark Streaming   Real-time Data Engineer,,
Automation   Machine Learning   TensorFlow, PyTorch, scikit-learn   Machine Learning Engineer,,
DevOps   Kubernetes   Kubernetes Administration   DevOps Engineer,,
CI/CD   Data Visualization   PowerBI, Tableau Dashboards   Business Intelligence Analyst,,
Week 4:
Week 4:  Focus: Data Wrangling and ETL Processes
Focus: Data Wrangling and ETL Processes
Focus: Data Wrangling and ETL Processes  Skill Audit Summary
Focus: Data Wrangling and ETL Processes  Skill Audit Summary  Existing Skills   Skill Gaps   Recommended Topics   Career Suggestions
Focus: Data Wrangling and ETL Processes  Skill Audit Summary  Existing Skills   Skill Gaps   Recommended Topics   Career Suggestions
Focus: Data Wrangling and ETL Processes  Skill Audit Summary  Existing Skills   Skill Gaps   Recommended Topics   Career Suggestions
Focus: Data Wrangling and ETL Processes         Skill Audit Summary         Existing Skills         Skill Gaps   Recommended Topics   Career Suggestions
Focus: Data Wrangling and ETL Processes         Skill Audit Summary         Existing Skills         Skill Gaps         Recommended Topics         Career Suggestions
Focus: Data Wrangling and ETL Processes  Skill Audit Summary  Existing Skills   Skill Gaps   Recommended Topics   Career Suggestions
Focus:       Data Wrangling and ETL Processes         Skill Audit Summary         Existing Skills         Skill Gaps   Recommended Topics   Career Suggestions
Focus:       Data Wrangling and ETL Processes         Skill Audit Summary         Existing Skills         Skill Gaps   Recommended Topics   Career Suggestions
Skill Audit Summary  Existing Skills   Skill Gaps   Recommended Topics   Career Suggestions
Focus:       Data Wrangling and ETL Processes         Skill Audit Summary         Existing Skills         Skill Gaps   Recommended Topics   Career Suggestions

Python   AWS   AWS Data Services   Senior Data Engineer,,				
GIS   Cloud Optimization   Azure, Terraform   Cloud Architect,,				
ETL Processes   Big Data Tools   Hadoop, Spark   Big Data Engineer,,				
Database Design   Spark Streaming   Spark Streaming   Real-time Data Engineer,,				
Automation   Machine Learning   TensorFlow, PyTorch, scikit-learn   Machine Learning Engineer,,				
DevOps   Kubernetes   Kubernetes Administration   DevOps Engineer,,				
CI/CD   Data Visualization   PowerBI, Tableau Dashboards   Business Intelligence Analyst,,				
Task:				
Skill Audit Summary				
Existing Skills   Skill Gaps   Recommended Topics   Career Suggestions				
Python   AWS   AWS Data Services   Senior Data Engineer,,				
GIS   Cloud Optimization   Azure, Terraform   Cloud Architect,,				
ETL Processes   Big Data Tools   Hadoop, Spark   Big Data Engineer,,				
Database Design   Spark Streaming   Spark Streaming   Real-time Data Engineer,,				
Automation   Machine Learning   TensorFlow, PyTorch, scikit-learn   Machine Learning Engineer,,				
DevOps   Kubernetes   Kubernetes Administration   DevOps Engineer,,				
CI/CD   Data Visualization   PowerBI, Tableau Dashboards   Business Intelligence Analyst,,				
Week 5:				
Focus: Introduction to Data Warehousing and Data Lakes				
Skill Audit Summary				
Existing Skills   Skill Gaps   Recommended Topics   Career Suggestions				
Python   AWS   AWS Data Services   Senior Data Engineer,,				
GIS   Cloud Optimization   Azure, Terraform   Cloud Architect,,				
ETL Processes   Big Data Tools   Hadoop, Spark   Big Data Engineer,,				
Database Design   Spark Streaming   Spark Streaming   Real-time Data Engineer,,				
Automation   Machine Learning   TensorFlow, PyTorch, scikit-learn   Machine Learning Engineer,,				
DevOps   Kubernetes   Kubernetes Administration   DevOps Engineer,,				

Resources: Skill Audit Summary | Skill Gaps | Recommended Topics | Career Suggestions Existing Skills ----- | ------ | ------- | -------| AWS | AWS Data Services | Senior Data Engineer,..,.. Python GIS | Cloud Optimization | Azure, Terraform | Cloud Architect,..,.. ETL Processes | Big Data Tools | Hadoop, Spark | Big Data Engineer,..,.. Database Design | Spark Streaming | Spark Streaming | Real-time Data Engineer,..,.. | Machine Learning | TensorFlow, PyTorch, scikit-learn | Machine Learning Engineer,..... Automation DevOps | Kubernetes | Kubernetes Administration | DevOps Engineer,..,.. CI/CD | Data Visualization | PowerBI, Tableau Dashboards | Business Intelligence Analyst,..... Task: **Skill Audit Summary** Existing Skills | Skill Gaps | Recommended Topics | Career Suggestions ----- | ------ | -------AWS Data Services | Senior Data Engineer,..... Python l AWS GIS | Cloud Optimization | Azure, Terraform | Cloud Architect,..,.. ETL Processes | Big Data Tools | Hadoop, Spark | Big Data Engineer,..,.. Database Design | Spark Streaming | Spark Streaming | Real-time Data Engineer,..... Automation | Machine Learning | TensorFlow, PyTorch, scikit-learn | Machine Learning Engineer,.... | Kubernetes DevOps | Kubernetes Administration | DevOps Engineer,..,.. CI/CD | Data Visualization | PowerBI, Tableau Dashboards | Business Intelligence Analyst,..... Week 6: Focus: Cloud Data Storage and Processing (Google Cloud Platform) **Skill Audit Summary** Existing Skills | Skill Gaps | Recommended Topics | Career Suggestions ----- | ------ | -------Python AWS Data Services | Senior Data Engineer,..,.. | Cloud Optimization | Azure, Terraform | Cloud Architect,..,.. GIS

| Data Visualization | PowerBI, Tableau Dashboards | Business Intelligence Analyst,..,..

CI/CD

| Big Data Tools | Hadoop, Spark | Big Data Engineer,..... ETL Processes Database Design | Spark Streaming | Spark Streaming | Real-time Data Engineer,..... Automation | Machine Learning | TensorFlow, PyTorch, scikit-learn | Machine Learning Engineer,..... DevOps | Kubernetes | Kubernetes Administration | DevOps Engineer,..... CI/CD | Data Visualization | PowerBI, Tableau Dashboards | Business Intelligence Analyst,..,.. **Skill Audit Summary** Resources: Existing Skills | Skill Gaps | Recommended Topics | Career Suggestions ----- | ------ | ------- | -------Python | AWS | AWS Data Services | Senior Data Engineer,..,.. GIS | Cloud Optimization | Azure, Terraform | Cloud Architect,..... | Big Data Tools | Hadoop, Spark | Big Data Engineer,..... ETL Processes Database Design | Spark Streaming | Spark Streaming | Real-time Data Engineer,..,.. Automation | Machine Learning | TensorFlow, PyTorch, scikit-learn | Machine Learning Engineer,..... DevOps | Kubernetes | Kubernetes Administration | DevOps Engineer,..,.. CI/CD | Data Visualization | PowerBI, Tableau Dashboards | Business Intelligence Analyst,..... Task: **Skill Audit Summary** Existing Skills | Skill Gaps | Recommended Topics | Career Suggestions ----- | ------ | -------| AWS Data Services | Senior Data Engineer,..,.. Python | AWS GIS | Cloud Optimization | Azure, Terraform | Cloud Architect,..... ETL Processes | Big Data Tools | Hadoop, Spark | Big Data Engineer,..,.. Database Design | Spark Streaming | Spark Streaming | Real-time Data Engineer,..,.. Automation | Machine Learning | TensorFlow, PyTorch, scikit-learn | Machine Learning Engineer,.... DevOps | Kubernetes | Kubernetes Administration | DevOps Engineer,.... CI/CD | Data Visualization | PowerBI, Tableau Dashboards | Business Intelligence Analyst,..... Week 7: Focus: Data Pipeline Optimization and Automation

**Skill Audit Summary** 

Existing Skills   Skill Gaps   Recommended Topics   Career Suggestions
Python   AWS   AWS Data Services   Senior Data Engineer,,
GIS   Cloud Optimization   Azure, Terraform   Cloud Architect,,
ETL Processes   Big Data Tools   Hadoop, Spark   Big Data Engineer,,
Database Design   Spark Streaming   Spark Streaming   Real-time Data Engineer,,
Automation   Machine Learning   TensorFlow, PyTorch, scikit-learn   Machine Learning Engineer,,
DevOps   Kubernetes   Kubernetes Administration   DevOps Engineer,,
CI/CD   Data Visualization   PowerBI, Tableau Dashboards   Business Intelligence Analyst,,
Resources: Skill Audit Summary
Existing Skills   Skill Gaps   Recommended Topics   Career Suggestions
Python   AWS   AWS Data Services   Senior Data Engineer,,
GIS   Cloud Optimization   Azure, Terraform   Cloud Architect,,
ETL Processes   Big Data Tools   Hadoop, Spark   Big Data Engineer,,
Database Design   Spark Streaming   Real-time Data Engineer,,
Automation   Machine Learning   TensorFlow, PyTorch, scikit-learn   Machine Learning Engineer,,
DevOps   Kubernetes   Kubernetes Administration   DevOps Engineer,,
CI/CD   Data Visualization   PowerBI, Tableau Dashboards   Business Intelligence Analyst,,
Task:
Skill Audit Summary
Existing Skills   Skill Gaps   Recommended Topics   Career Suggestions
Python   AWS   AWS Data Services   Senior Data Engineer,,
GIS   Cloud Optimization   Azure, Terraform   Cloud Architect,,
ETL Processes   Big Data Tools   Hadoop, Spark   Big Data Engineer,,
Database Design   Spark Streaming   Spark Streaming   Real-time Data Engineer,,
Automation   Machine Learning   TensorFlow, PyTorch, scikit-learn   Machine Learning Engineer,,
DevOps   Kubernetes   Kubernetes Administration   DevOps Engineer,,
CI/CD   Data Visualization   PowerBI, Tableau Dashboards   Business Intelligence Analyst,,

Week 8:
Focus: Data Governance and Quality Control
Skill Audit Summary
Existing Skills   Skill Gaps   Recommended Topics   Career Suggestions
Python   AWS   AWS Data Services   Senior Data Engineer,,
GIS   Cloud Optimization   Azure, Terraform   Cloud Architect,,
ETL Processes   Big Data Tools   Hadoop, Spark   Big Data Engineer,,
Database Design   Spark Streaming   Spark Streaming   Real-time Data Engineer,,
Automation   Machine Learning   TensorFlow, PyTorch, scikit-learn   Machine Learning Engineer,,
DevOps   Kubernetes   Kubernetes Administration   DevOps Engineer,,
CI/CD   Data Visualization   PowerBI, Tableau Dashboards   Business Intelligence Analyst,,
Percurses https://www.ihm.com/topics/data-gavernance)
Resources: https://www.ibm.com/topics/data-governance)
Skill Audit Summary
Existing Skills   Skill Gaps   Recommended Topics   Career Suggestions
Python   AWS   AWS Data Services   Senior Data Engineer,,
GIS   Cloud Optimization   Azure, Terraform   Cloud Architect,,
ETL Processes   Big Data Tools   Hadoop, Spark   Big Data Engineer,,
Database Design   Spark Streaming   Spark Streaming   Real-time Data Engineer,,
Automation   Machine Learning   TensorFlow, PyTorch, scikit-learn   Machine Learning Engineer,,
DevOps   Kubernetes   Kubernetes Administration   DevOps Engineer,,
CI/CD   Data Visualization   PowerBI, Tableau Dashboards   Business Intelligence Analyst,,
Tooks
Task:
Skill Audit Summary

Existing Skills	Skill Gaps	Recommended T	opics   Career Suggestions
		-	
Python	AWS	AWS Data Services	s   Senior Data Engineer,,
GIS	Cloud Optimiza	tion   Azure, Terraforr	m   Cloud Architect,,
ETL Processes	Big Data T	Tools   Hadoop, Spa	ark   Big Data Engineer,,

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| Spark Streaming | Spark Streaming | Real-time Data Engineer,..,..
Database Design
               | Machine Learning | TensorFlow, PyTorch, scikit-learn | Machine Learning Engineer.....
Automation
DevOps
              | Kubernetes
                           | Kubernetes Administration | DevOps Engineer,.....
CI/CD
             | Data Visualization | PowerBI, Tableau Dashboards | Business Intelligence Analyst.....
Week 9:
Focus:
              Cloud Computing and DevOps (Google Cloud Platform)
Skill Audit Summary
Existing Skills | Skill Gaps | Recommended Topics | Career Suggestions
----- | ------ | -------
Python
            AWS | AWS Data Services | Senior Data Engineer,.....
            | Cloud Optimization | Azure, Terraform | Cloud Architect,.....
GIS
ETL Processes
                 | Big Data Tools | Hadoop, Spark | Big Data Engineer,.....
Database Design | Spark Streaming | Spark Streaming
                                                       | Real-time Data Engineer,.....
Automation
              | Machine Learning | TensorFlow, PyTorch, scikit-learn | Machine Learning Engineer,.....
DevOps
                           | Kubernetes Administration | DevOps Engineer,.....
             | Kubernetes
CI/CD
             | Data Visualization | PowerBI, Tableau Dashboards | Business Intelligence Analyst,..,..
              Skill Audit Summary
Resources:
Existing Skills | Skill Gaps | Recommended Topics | Career Suggestions
----- | ------ | -------
            AWS Data Services | Senior Data Engineer,.....
Python
            | Cloud Optimization | Azure, Terraform | Cloud Architect,.....
GIS
ETL Processes
                 | Big Data Tools | Hadoop, Spark | Big Data Engineer,.....
Database Design | Spark Streaming | Spark Streaming
                                                       | Real-time Data Engineer,.....
Automation
              | Machine Learning | TensorFlow, PyTorch, scikit-learn | Machine Learning Engineer,.....
DevOps
             | Kubernetes
                           | Kubernetes Administration | DevOps Engineer,...,..
CI/CD
             | Data Visualization | PowerBI, Tableau Dashboards | Business Intelligence Analyst,.....
Task:
Skill Audit Summary
Existing Skills
              | Skill Gaps
                              | Recommended Topics
                                                     | Career Suggestions
```

	AWS   AWS Data Services   Senior Data Engineer,,				
GIS	Cloud Optimization   Azure, Terraform   Cloud Architect,,				
ETL Processes	Big Data Tools   Hadoop, Spark   Big Data Engineer,,				
Database Desig	n   Spark Streaming   Spark Streaming   Real-time Data Engineer,,				
Automation	Machine Learning   TensorFlow, PyTorch, scikit-learn   Machine Learning Engineer,,				
DevOps	Kubernetes   Kubernetes Administration   DevOps Engineer,,				
CI/CD	Data Visualization   PowerBI, Tableau Dashboards   Business Intelligence Analyst,,				
Week 10:					
Focus:	Review and Final Project				
Skill Audit Su	mmary				
Existing Skills	Skill Gaps   Recommended Topics   Career Suggestions				
Python	AWS Data Services   Senior Data Engineer,,				
GIS	Cloud Optimization   Azure, Terraform   Cloud Architect,,				
ETL Processes	Big Data Tools   Hadoop, Spark   Big Data Engineer,,				
Database Desig	n   Spark Streaming   Spark Streaming   Real-time Data Engineer,,				
Automation	Machine Learning   TensorFlow, PyTorch, scikit-learn   Machine Learning Engineer,,				
DevOps	Kubernetes   Kubernetes Administration   DevOps Engineer,,				
CI/CD	CI/CD   Data Visualization   PowerBI, Tableau Dashboards   Business Intelligence Analyst,,				
<b>.</b>					
Resources:	·				
-	Skill Gaps   Recommended Topics   Career Suggestions				
	AWS Data Services   Senior Data Engineer,,				
·	Cloud Optimization   Azure, Terraform   Cloud Architect,,				
	Big Data Tools   Hadoop, Spark   Big Data Engineer,,				
	n   Spark Streaming   Spark Streaming   Real-time Data Engineer,,				
Automation					
DevOps	Kubernetes   Kubernetes Administration   DevOps Engineer,,				
CI/CD	Data Visualization   PowerBI, Tableau Dashboards   Business Intelligence Analyst,,				

## Task:

CI/CD

## **Skill Audit Summary**

Existing Skills	Skill Gaps	Recommended T	opics   Car	eer Suggestions	
		-			
Python	AWS	AWS Data Services	s   Senior	Data Engineer,,	
GIS	Cloud Optimizat	tion   Azure, Terraforr	m   Cloud	Architect,,	
ETL Processes	Big Data T	ools   Hadoop, Spa	ark   Big	Data Engineer,,	
Database Design	n   Spark Stre	eaming   Spark Stre	eaming	Real-time Data Engineer,.	.,
Automation	Machine Lea	rning   TensorFlow,	PyTorch, sciki	t-learn   Machine Learning	Engineer,,
DevOps	Kubernetes	Kubernetes Adn	ninistration   De	evOps Engineer,,	

| Data Visualization | PowerBI, Tableau Dashboards | Business Intelligence Analyst,..,..