### **AWS SERVICES:**

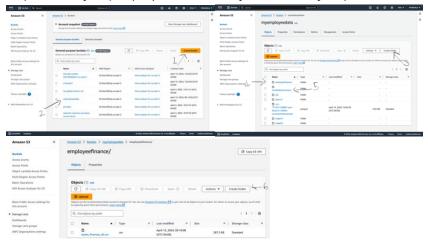
### USED SERVICES: S3 BUCKET, IAM, AWS GLUE, AWS SLUE STUDIO, ATHENA

### **S3 BUCKET**

step1:Create a new bucket in an S3 Bucket

step2:Create a folder and 2 subfolders in it

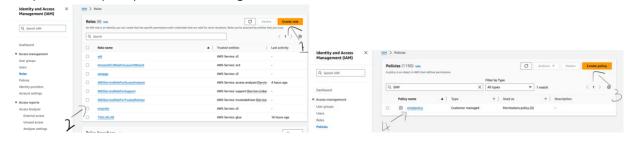
step3:Insert file (employee state and finance CSV files)



#### IAM

step1:Create a Role and a new policy

Step 2:Attach policy to the role assigned.





### **AWS GLUE**

step1:Create a database following up with a table and crawler



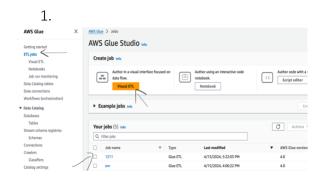
# **AWS GLUE STUDIO**

step1: ETL Visual

step2:Start node diagrams with

step3 :Amazon S3 – Node 1

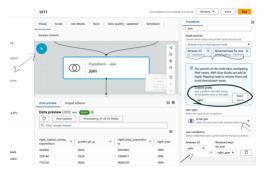
step4 :Amazon S3 – Node 2

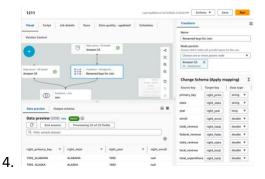


2.

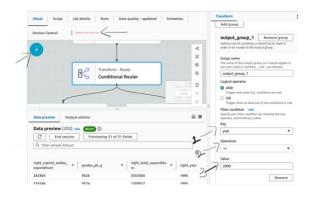


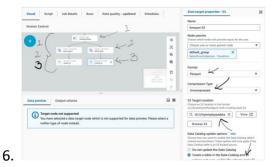
3.





5.





under transforms:

step5 :JOIN NODE ( year =right year)

step6 :Conditional Node {AND - Year(key)- <=2000(value)}</pre>

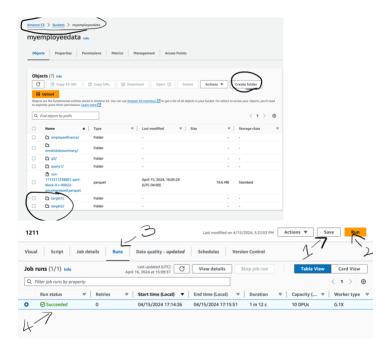


Under Targets: (Assign IAM)

step7 :S3 Node : Folders(f1, f2)

step8: Browse the S3 target path

step9:Uncompress step10:Data Catalog step11: Create table



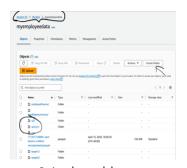
step12:Do for both targets: Save & Run

Running Status: Succeeded

### **S3 BUCKET:**

step1:Back to the Bucket path

step2 :create new Query1 & Query2 folders



step3:And a table

step4:Table data for files

step5:Connecting to Athena

# ATHENA:

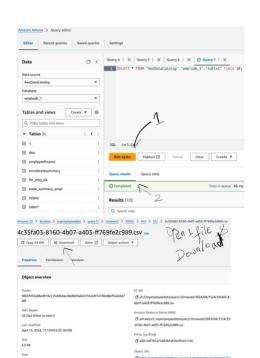
step1 :settings | Manage | Browse S3 path(q1) | Save | Editor | Run

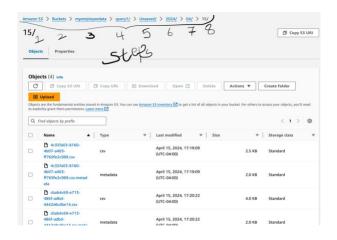
step2 :Check the table in the S3 bucket: under the Q1 folder & download the table to view the

step3:Same for Query2 Run step: 1 in Athena and view









+ Sheet 1

apital multipy expenditure							4c35fa03-8160-4807-a403-6403-809-8															
	grades jak.g. right, latat_expendit	ture right year t	right state revenue gra	des_12.p	right grades, E.g.	right instruction expenditure y	printer, st. p	right productify state	ript, send grades, 8,0	right, bedoral, revenue	year right	grades, 4.p	right, support, services, expenditure	right state	right grades by p	primary key	grades kg.g	grades,4,9	right grades at y	grades, L.A.y	right, primary, key	right, las
		1998		45571.0	55262.0		724751.2	1 45571.0 ALABAM	A 55252.0		1986	\$7501.0		ALABAMA	54265.0	1988, ALABAMA	54265.0	57531.0	734751.0		1988,ALABAMA	
		1988		49571.0	7104.0		724751.0	E 6651.0 ALABAM	A 16262.0		1986	8517.0		ALASKA	9637.0	1968, ALABAMA	54265.0	87931.0	106481.0	1	1988_ALASKA	
		1989		45871.0	39317.0		724751.0	3 36ME O ALABAM	A 56060.0		1986	45518.0		ARIZONA	48132.0	TREE, ALABAMA	54365.0	67531.0	574890.0		1986,ARIZONA	
		1986		45571.0	33461.0		724751.0	30074.0 ALABAM	A 55252.0		1986	33777.0		ARKANSAS	34023.0	1968, ALABAMA	54265.0	\$7581.0	436387.0	p)	1988_ANKANSAS	
		1988		45571.0	318856.0		724791.0	257450.0 ALABAM	A 95050 0		1988	352074.0		CALIFORNIA	403237.0	1968, ALABAMA	54265.0	57631.0	4818120.0		1988, CALIFORNIA	
		1988		45571.0	29524.0		724751.0	17536.0 ALABAM	A 55052.0		1986	43381.0		COLOFADO	41599.0	1966, ALABAMA	54265.0	57531.0	590081.0	b .	1988_COLOFIADO	
		1968		45571.0	31712.0		724791.0	121940 ALABAM	A 55002.0		1988	34074.0		CONNECTION	38689.0	TREE, ALASAMA	54265.0	87901.0	490637.0	)	1986,CONNECTICUT	
		1968		45571.0	6857.0		724751.0	B 6007.0 ALABAM	A 55052.0		1988	7990.0		DELAWARE	7979.0	1965,ALABAMA	54265.0	87681.0	96678.0	b	1988, DELAWARE	
		1909		45571.0	5342.0		724751.0	1 ASHED ALABAM	A 95092.0		1986	6042.0		DISTRICT_OF_COLUMBA	A 6090.0	THER, ALABAMA	54265.0	97931.0	84792.0		1989_DISTRICT_OF_COLUMN	IA.
		1988		45571.0	127642.0		724791.0	PROSEC ALABAM	95362.0		1988	130484.0		FLORIDA	153773.0	THE ALABAMA	54265.0	57551.0	1720900.0	1	1988 FLORIDA	