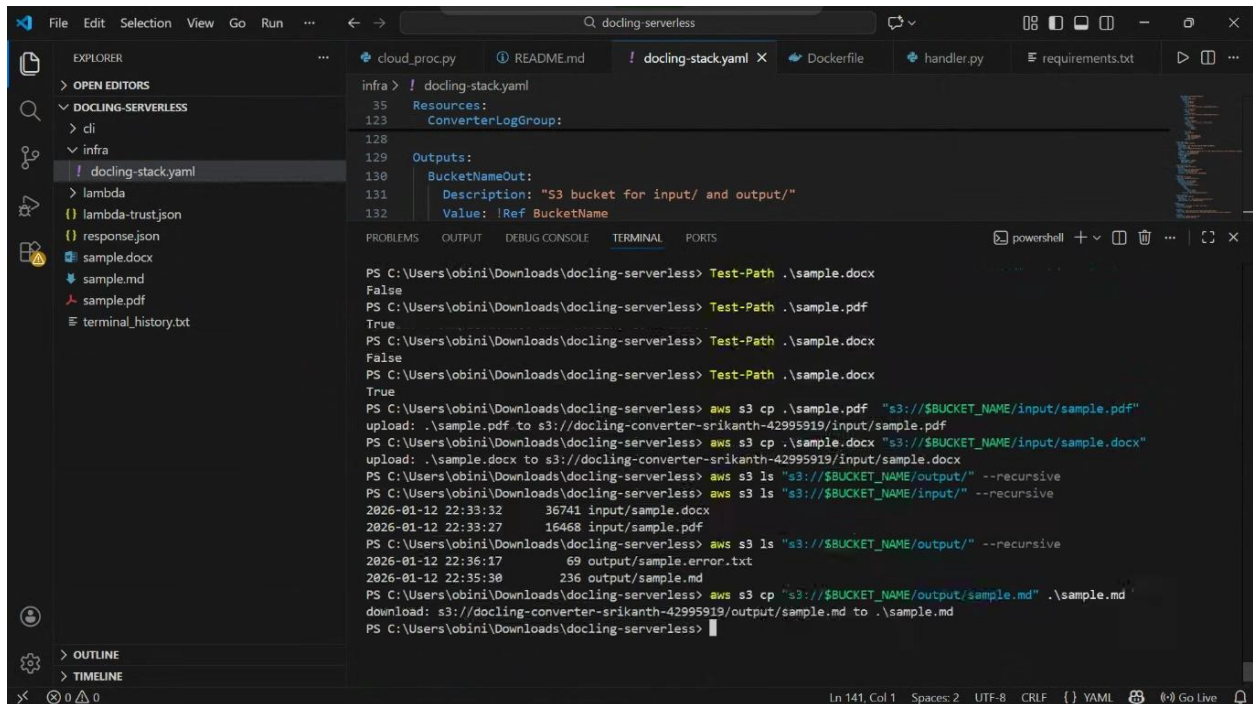


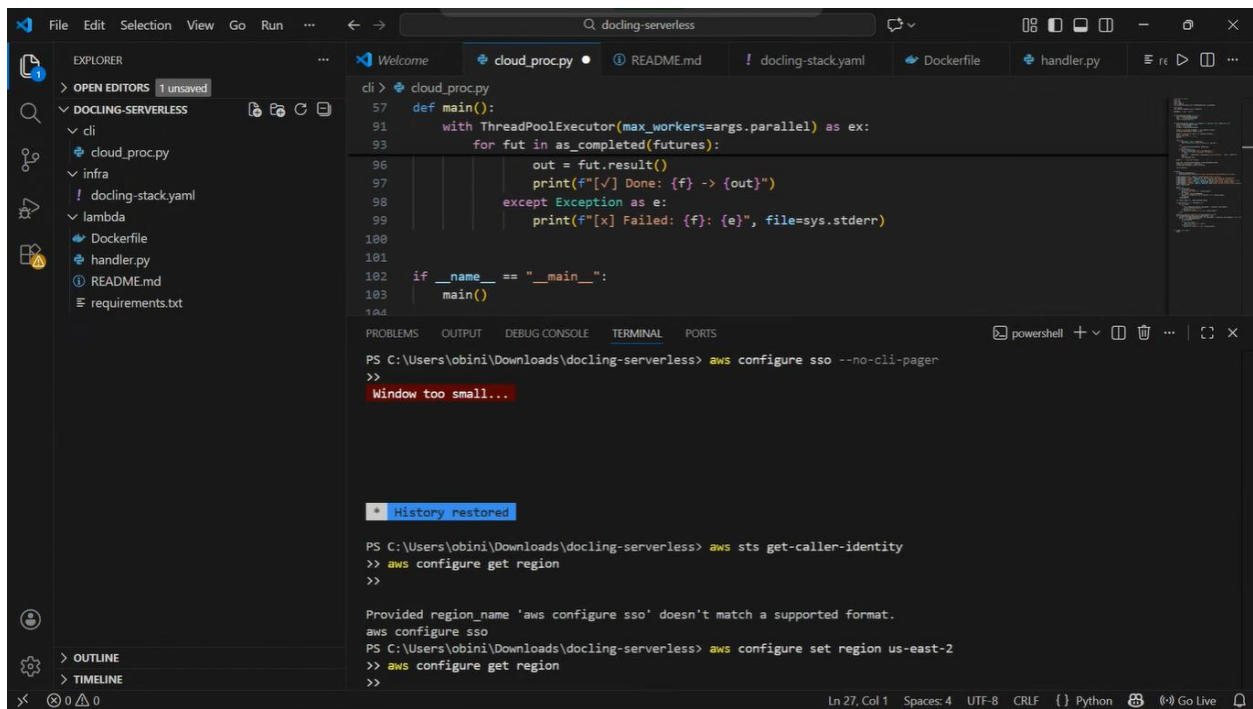
This is the final screen show of giving inputs like .pdf and .docx and getting output as MD markdown file



The screenshot displays the Visual Studio Code interface with a terminal window open. The terminal shows a series of commands and their outputs, demonstrating the process of uploading files to an S3 bucket, listing the contents, and downloading the converted output.

```
infra > ! docling-stack.yml
35 Resources:
123 ConverterLogGroup:
128
129 Outputs:
130 BucketNameOut:
131 Description: "S3 bucket for input/ and output/"
132 Value: !Ref BucketName

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\obini\Downloads\docling-serverless> Test-Path .\sample.docx
False
PS C:\Users\obini\Downloads\docling-serverless> Test-Path .\sample.pdf
True
PS C:\Users\obini\Downloads\docling-serverless> Test-Path .\sample.docx
False
PS C:\Users\obini\Downloads\docling-serverless> Test-Path .\sample.docx
True
PS C:\Users\obini\Downloads\docling-serverless> aws s3 cp .\sample.pdf "s3://$BUCKET_NAME/input/sample.pdf"
upload: .\sample.pdf to s3://docling-converter-srikanth-42995919/input/sample.pdf
PS C:\Users\obini\Downloads\docling-serverless> aws s3 cp .\sample.docx "s3://$BUCKET_NAME/input/sample.docx"
upload: .\sample.docx to s3://docling-converter-srikanth-42995919/input/sample.docx
PS C:\Users\obini\Downloads\docling-serverless> aws s3 ls "s3://$BUCKET_NAME/output/" --recursive
PS C:\Users\obini\Downloads\docling-serverless> aws s3 ls "s3://$BUCKET_NAME/input/" --recursive
2026-01-12 22:33:32 36741 input/sample.docx
2026-01-12 22:33:27 16468 input/sample.pdf
PS C:\Users\obini\Downloads\docling-serverless> aws s3 ls "s3://$BUCKET_NAME/output/" --recursive
2026-01-12 22:36:17 69 output/sample.error.txt
2026-01-12 22:35:30 236 output/sample.md
PS C:\Users\obini\Downloads\docling-serverless> aws s3 cp "s3://$BUCKET_NAME/output/sample.md" .\sample.md
download: s3://docling-converter-srikanth-42995919/output/sample.md to .\sample.md
PS C:\Users\obini\Downloads\docling-serverless>
```



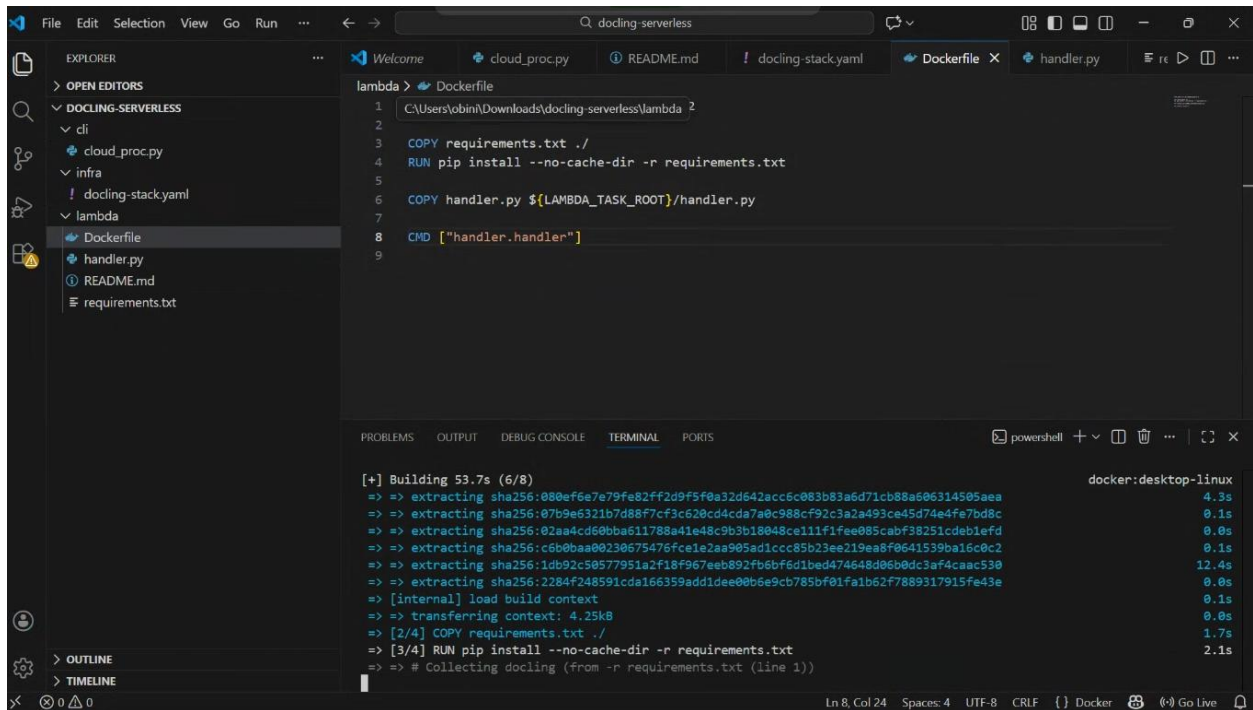
The screenshot shows the VS Code editor with the `cloud_proc.py` file open. The file contains a Python script that uses `ThreadPoolExecutor` to run tasks in parallel. The terminal window shows the following commands and output:

```
PS C:\Users\obini\Downloads\docling-serverless> aws configure sso --no-cli-pager
>>
Window too small...

* History restored

PS C:\Users\obini\Downloads\docling-serverless> aws sts get-caller-identity
>> aws configure get region
>>

Provided region_name 'aws configure sso' doesn't match a supported format.
aws configure sso
PS C:\Users\obini\Downloads\docling-serverless> aws configure set region us-east-2
>> aws configure get region
>>
```



The screenshot shows the VS Code editor with the `Dockerfile` file open. The file contains the following Dockerfile instructions:

```
1 C:\Users\obini\Downloads\docling-serverless\lambda 2
2
3 COPY requirements.txt ./
4 RUN pip install --no-cache-dir -r requirements.txt
5
6 COPY handler.py ${LAMBDA_TASK_ROOT}/handler.py
7
8 CMD ["handler.handler"]
9
```

The terminal window shows the output of the `docker build` command:

```
[+] Building 53.7s (6/8) docker:desktop-linux
=> extracting sha256:080ef6e7e79fe82ff2d9f5f0a32d642acc6c083b83a6d71cb88a506314505aea 4.3s
=> extracting sha256:07b9e6321b7d88f7cf3c620cd4da7a0c988cf92c3a2a493ce45d74e4fe7bd8c 0.1s
=> extracting sha256:02aa4cd60bba611788a41e48c9b3b18048ce11f1fee085cabf38251cdeb1efd 0.0s
=> extracting sha256:c6b0baa00230675476fce1e2aa905ad1ccc85b23ee219ea8f0641539ba16c0c2 0.1s
=> extracting sha256:1db92c50577951a2f18f967eeb892fb6bf6d1bed474648d06b0dc3af4caac530 12.4s
=> extracting sha256:2284f248591cda166359add1dee00b6e9cb785bf01fa1b62f7889317915fe43e 0.0s
=> [internal] load build context 0.1s
=> transferring context: 4.25kB 0.0s
=> [2/4] COPY requirements.txt ./ 1.7s
=> [3/4] RUN pip install --no-cache-dir -r requirements.txt 2.1s
=> # Collecting docling (from -r requirements.txt (line 1))
```

```
File Edit Selection View Go Run ... < -> Q docling-serverless
EXPLORER
> OPEN EDITORS
docling-serverless
  cli
  cloud_proc.py
  infra
  ! docling-stack.yaml
  lambda
    Dockerfile
    handler.py
    README.md
    requirements.txt
    lambda-trust.json
    response.json
    terminal_history.txt
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
=> => exporting manifest sha256:65393bb15fc797d5d147ec63484a31143f0e48b6312807b9708f34df04a41ad0 0.0s
=> => exporting config sha256:01dd29648e186711db9c76a7fca32027fae06f0e3d4c6af6e482b078692865c5 0.1s
=> => exporting attestation manifest sha256:f6d235f4c14a5de3bab48da8837a14a21660bb6ecf92fc5eb8c3a1531e758f4a 0.1s
=> => exporting manifest list sha256:aca00f72efbae24e844b934fb0244459182966a58043b59a2518e5b60f58d90 0.1s
=> => naming to docker.io/library/docling-serverless:lambda-slim 0.0s
=> => unpacking to docker.io/library/docling-serverless:lambda-slim 176.4s
PS C:\Users\obini\Downloads\docling-serverless> docker image ls --format "table {{.Repository}}\t{{.Tag}}\t{{.ID}}\t{{.Size}}\n"
REPOSITORY TAG IMAGE ID SIZE
docling-serverless lambda-slim aca00f72efba 13.2GB
755716729753.dkr.ecr.us-east-2.amazonaws.com/docling-serverless latest bff902624256 13.7GB
docling-serverless latest bff902624256 13.7GB
PS C:\Users\obini\Downloads\docling-serverless> notepad lambda\Dockerfile
PS C:\Users\obini\Downloads\docling-serverless> docker build -t docling-serverless:lambda-cpu -f lambda/Dockerfile lambda

2026/01/12 01:41:34 http2: server: error reading preface from client //./pipe/dockerDesktopLinuxEngine: file has already b
[+] Building 65.7s (8/10) docker:desktop-linux
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 766B 0.0s
=> [internal] load metadata for public.ecr.aws/lambda/python:3.12 3.1s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [internal] load build context 0.0s
=> => transferring context: 67B 0.0s
=> [builder 1/4] FROM public.ecr.aws/lambda/python:3.12@sha256:09a30e634a5bb55ee10c7e89ed595edc18064ea761099d61c97 0.1s
=> => resolve public.ecr.aws/lambda/python:3.12@sha256:09a30e634a5bb55ee10c7e89ed595edc18064ea761099d61c979e34a195 0.1s
=> CACHED [builder 2/4] WORKDIR /build 0.0s
=> CACHED [builder 3/4] COPY requirements.txt . 0.0s
=> ERROR [builder 4/4] RUN microdnf install -y gcc gcc-c++ make && pip install --no-cache-dir --index-url htt 62.3s
-----
> [builder 4/4] RUN microdnf install -y gcc gcc-c++ make && pip install --no-cache-dir --index-url https://download.p
ytorch.org/whl/cpu -r requirements.txt -t /opt/python && microdnf clean all && rm -rf /root/.cache:
1.497 Downloading metadata...
26.42 Package
26.43 Test all lines
Repository Size
```

```
File Edit Selection View Go Run ... < -> Q docling-serverless
EXPLORER
> OPEN EDITORS
docling-serverless
  cli
  cloud_proc.py
  infra
  ! docling-stack.yaml
  lambda
    Dockerfile
    handler.py
    README.md
    requirements.txt
    lambda-trust.json
    response.json
    terminal_history.txt
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
+ CategoryInfo          : ParserError: (:) [], ParentContainsErrorRecordException
+ FullyQualifiedErrorId : MissingExpressionAfterOperator

PS C:\Users\obini\Downloads\docling-serverless> notepad lambda\Dockerfile
PS C:\Users\obini\Downloads\docling-serverless> ^C
PS C:\Users\obini\Downloads\docling-serverless> type lambda\Dockerfile
# ---- builder (can include build tools; will not ship) ----
FROM public.ecr.aws/lambda/python:3.12 AS builder
WORKDIR /build

COPY requirements.txt .

RUN microdnf install -y gcc gcc-c++ make && \
    pip install --no-cache-dir -r requirements.txt -t /opt/python \
    --extra-index-url https://download.pytorch.org/whl/cpu && \
    microdnf clean all && \
    rm -rf /root/.cache

# ---- runtime (clean, no compilers) ----
FROM public.ecr.aws/lambda/python:3.12

COPY --from=builder /opt/python /opt/python
COPY handler.py ${LAMBDA_TASK_ROOT}/handler.py

CMD ["handler.lambda_handler"]
PS C:\Users\obini\Downloads\docling-serverless> docker build --no-cache -t docling-serverless:lambda-cpu -f lambda/Dockerf
ile lambda
[+] Building 566.0s (11/11) FINISHED docker:desktop-linux
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 648B 0.0s
=> [internal] load metadata for public.ecr.aws/lambda/python:3.12 2.8s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [internal] load build context 0.0s
=> => transferring context: 67B 0.0s
```

```
File Edit Selection View Go Run ... < -> Q docling-serverless
EXPLORER
> OPEN EDITORS
DOCLING-SERVERLESS
  cli
  cloud_proc.py
  infra
  ! docling-stack.yaml
  lambda
    Dockerfile
    handler.py
    README.md
    requirements.txt
    lambda-trust.json
    response.json
    terminal_history.txt
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
e)} | findstr docling-serverless
docling-serverless
docling-serverless
755716729753.dkr.ecr.us-east-2.amazonaws.com/docling-serverless
docling-serverless
PS C:\Users\obini\Downloads\docling-serverless> docker tag docling-serverless:lambda-cpu 755716729753.dkr.ecr.us-east-2.am
azonaws.com/docling-serverless:lambda-cpu
PS C:\Users\obini\Downloads\docling-serverless> docker push 755716729753.dkr.ecr.us-east-2.amazonaws.com/docling-serverles
s:lambda-cpu
The push refers to repository [755716729753.dkr.ecr.us-east-2.amazonaws.com/docling-serverless]
13a2e48418c6: Pushed
1db92c505779: Layer already exists
d5bd734dc6f2: Pushed
07b9e6321b7d: Layer already exists
6698bcd2e96: Pushed
02aa4cd60bba: Layer already exists
2284f248591c: Layer already exists
c6b0baa00230: Layer already exists
080ef6e7e79f: Layer already exists
lambda-cpu: digest: sha256:37ad7055731641a930b820ca176015879ca22c3fdab2cc0698d576b12bccb7c8 size: 856
PS C:\Users\obini\Downloads\docling-serverless> aws ecr list-images --repository-name docling-serverless --region us-east-2
{
  "imageIds": [
    {
      "imageDigest": "sha256:ff0da179359795ebb00fd70897ec87b66fddac9d8b4c0483993d53b4012576b6"
    },
    {
      "imageDigest": "sha256:3acf38e3ed9ce109e44a1bf0ce7c1acce84fbcff4651681d0a3aaba245619b40"
    },
    {
      "imageDigest": "sha256:f0bcb7a6b2afbb20cbb8c244015b389a3746fb2fc775b0e35dd9eb3090f55f71"
    },
    {
      "imageDigest": "sha256:b00a7b464d1d32048746d050003a1c73a0a8d6554d84d08945f6ca1be9"
    }
  ]
}
```

```
File Edit Selection View Go Run ... < -> Q docling-serverless
EXPLORER
> OPEN EDITORS
DOCLING-SERVERLESS
  cli
  cloud_proc.py
  infra
  ! docling-stack.yaml
  lambda
    Dockerfile
    handler.py
    README.md
    requirements.txt
    lambda-trust.json
    response.json
    terminal_history.txt
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
+ FullyQualifiedErrorId : InvalidVariableReferenceWithDrive
PS C:\Users\obini\Downloads\docling-serverless> $IMAGE_URI="${ACCOUNT}.dkr.ecr.${REGION}.amazonaws.com/${REPO}:${TAG}"
PS C:\Users\obini\Downloads\docling-serverless> $IMAGE_URI
755716729753.dkr.ecr.us-east-2.amazonaws.com/docling-serverless:lambda-cpu
PS C:\Users\obini\Downloads\docling-serverless> aws ecr get-login-password --region $REGION |
>> docker login --username AWS --password-stdin "${ACCOUNT}.dkr.ecr.${REGION}.amazonaws.com"
Login Succeeded
PS C:\Users\obini\Downloads\docling-serverless> docker buildx build `
>> --platform linux/amd64 `
>> --provenance=false `
>> --sbom=false `
>> -t $IMAGE_URI `
>> -f lambda/Dockerfile lambda `
>> --push
[+] Building 10.6s (12/12) FINISHED docker:desktop-linux
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 648B 0.0s
=> [internal] load metadata for public.ecr.aws/lambda/python:3.12 3.6s
=> [internal] load .dockerignore 0.0s
=> transferring context: 2B 0.0s
=> [internal] load build context 0.0s
=> transferring context: 67B 0.0s
=> [builder 1/4] FROM public.ecr.aws/lambda/python:3.12@sha256:09a30e634a5bb55ee10c7e89ed595edc18064ea761099d61c97 1.8s
=> => resolve public.ecr.aws/lambda/python:3.12@sha256:09a30e634a5bb55ee10c7e89ed595edc18064ea761099d61c979e34a195 1.8s
=> CACHED [builder 2/4] WORKDIR /build 0.0s
=> CACHED [builder 3/4] COPY requirements.txt . 0.0s
=> CACHED [builder 4/4] RUN microdnf install -y gcc gcc-c++ make && pip install --no-cache-dir -r requirements 0.0s
=> CACHED [stage-1 2/3] COPY --from=builder /opt/python /opt/python 0.0s
=> CACHED [stage-1 3/3] COPY handler.py /var/task/handler.py 0.0s
=> exporting to image 4.8s
=> => exporting layers 0.0s
=> => exporting manifest sha256:80f6e7085207b954486b56063802a0aac6baf37926521db3151bb3ab5b516739 0.1s
=> => exporting config sha256:f484c7f3280c65fd2d5cd8410e1282e604b316b338685e908417e856324ce7ac 0.0s
=> => pushing image 0.0s
```

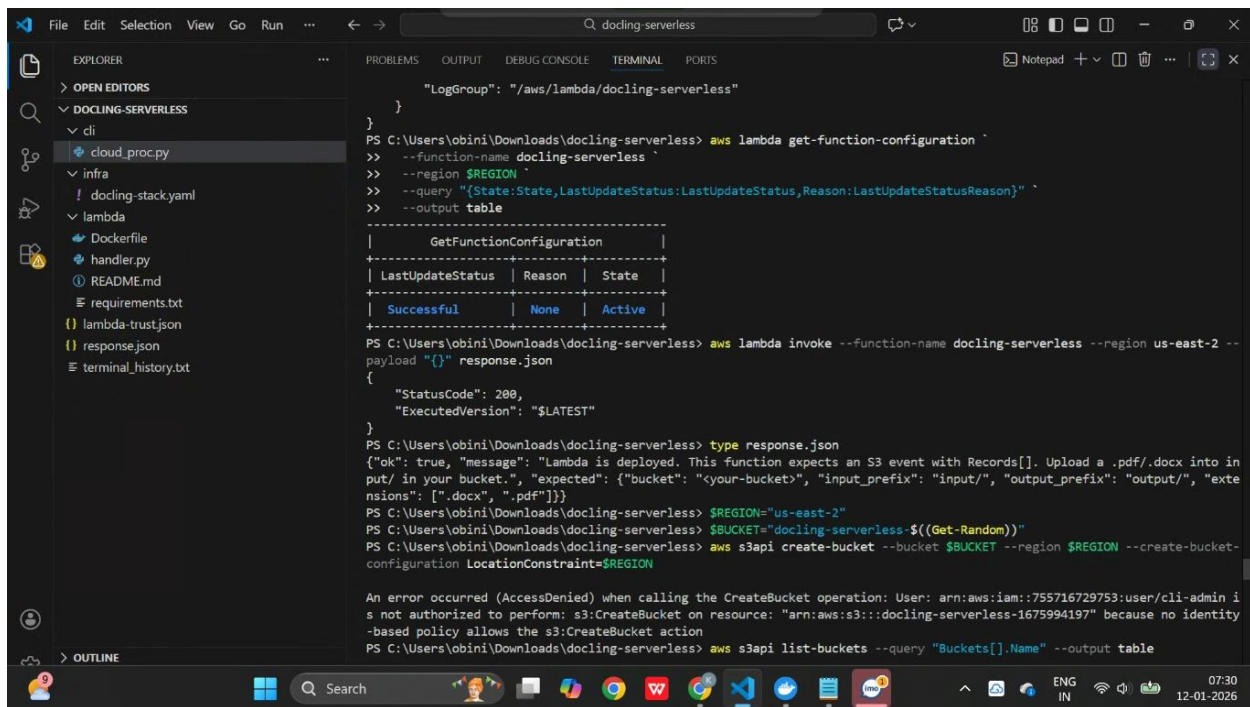


The screenshot shows a Visual Studio Code window with a project named 'DOCCLING-SERVERLESS'. The Explorer sidebar on the left shows the file structure: 'di', 'cloud\_proc.py', 'infra', 'docling-stack.yaml', 'lambda', 'Dockerfile', 'handler.py', 'README.md', 'requirements.txt', 'lambda-trust.json', 'response.json', and 'terminal\_history.txt'. The main editor area displays the output of the command `aws lambda create-function` in a PowerShell terminal. The output shows the function is being created with the name 'docling-serverless', package type 'Image', and role 'arn:aws:iam::755716729753:role/lambda-docling-role'. The function's state is 'Pending'.

```
PS C:\Users\obini\Downloads\docling-serverless> aws lambda create-function `
>> --function-name docling-serverless `
>> --package-type Image `
>> --code ImageUri=$IMAGE_URI `
>> --role $ROLE_ARN `
>> --region $REGION `
{
  "FunctionName": "docling-serverless",
  "FunctionArn": "arn:aws:lambda:us-east-2:755716729753:function:docling-serverless",
  "Role": "arn:aws:iam::755716729753:role/lambda-docling-role",
  "CodeSize": 0,
  "Description": "",
  "Timeout": 3,
  "MemorySize": 128,
  "LastModified": "2026-01-11T21:06:41.787+0000",
  "CodeSha256": "80f6e7885207b954486b56063802a0aac6baf37926521db3151bb3ab5b516739",
  "Version": "$LATEST",
  "TracingConfig": {
    "Mode": "PassThrough"
  },
  "RevisionId": "41142c2e-b29d-493f-be06-7b4471d864a7",
  "State": "Pending",
  "StateReason": "The function is being created.",
  "StateReasonCode": "Creating",
  "PackageType": "Image",
  "Architectures": [
    "x86_64"
  ],
  "EphemeralStorage": {
    "Size": 512
  },
  "SnapStart": {
    "ApplyOn": "None",
    "OptimizationStatus": "Off"
  }
}
```

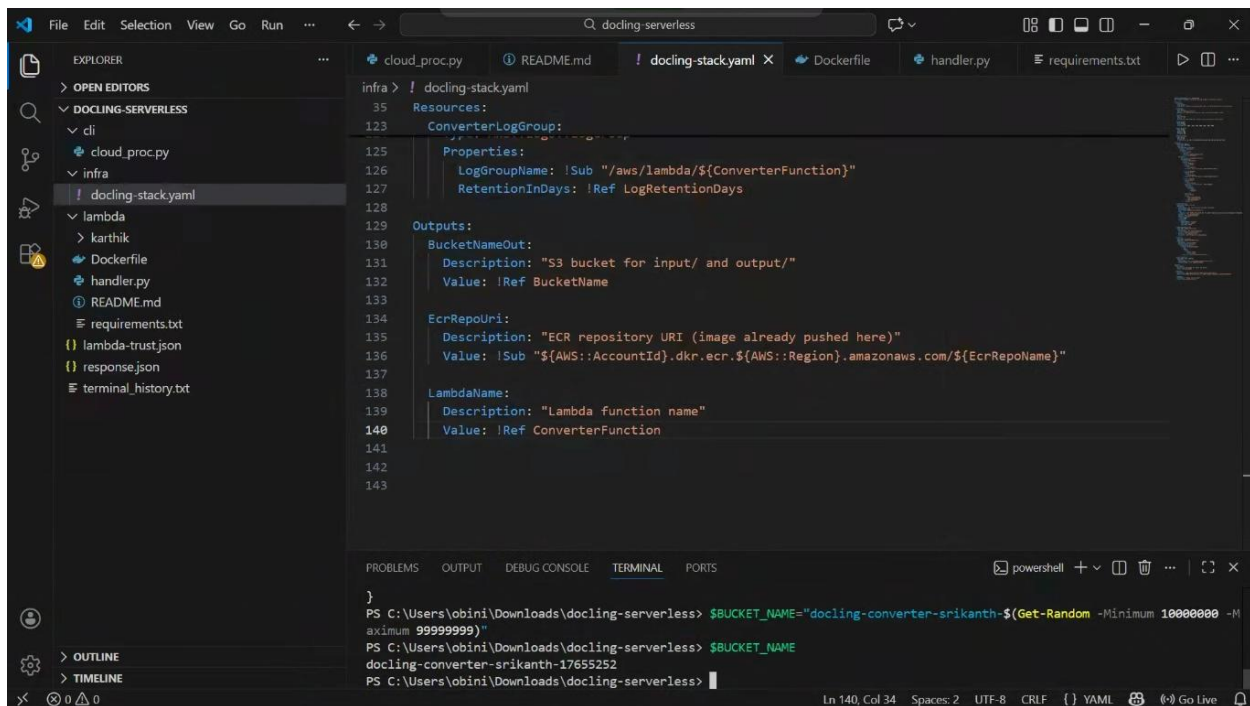
The screenshot shows the same Visual Studio Code window. The terminal now displays the output of `aws lambda get-function-configuration`, which shows the function's configuration, including the log group `/aws/lambda/docling-serverless`. Below this, the output of `aws lambda invoke` is shown, which returns a 200 status code. Finally, the output of `type response.json` is displayed, showing an error message: "Handler 'lambda\_handler' missing on module 'handler'".

```
PS C:\Users\obini\Downloads\docling-serverless> aws lambda get-function-configuration `
>> --function-name docling-serverless `
>> --region $REGION `
>> --query "{State:State,LastUpdateStatus:LastUpdateStatus,Reason:LastUpdateStatusReason}" `
>> --output table
+-----+-----+-----+
| GetFunctionConfiguration |
+-----+-----+-----+
| LastUpdateStatus | Reason | State |
+-----+-----+-----+
| Successful | None | Active |
+-----+-----+-----+
PS C:\Users\obini\Downloads\docling-serverless> aws lambda invoke `
>> --function-name docling-serverless `
>> --region $REGION `
>> --payload "{}" `
>> response.json
{
  "StatusCode": 200,
  "FunctionError": "Unhandled",
  "ExecutedVersion": "$LATEST"
}
PS C:\Users\obini\Downloads\docling-serverless> type response.json
{"errorMessage": "Handler 'lambda_handler' missing on module 'handler'", "errorType": "Runtime.HandlerNotFound", "requestId": "", "stackTrace": []}
PS C:\Users\obini\Downloads\docling-serverless> PS C:\Users\obini\Downloads\docling-serverless> aws lambda get-function-co
nfiguration `
>> --function-name docling-serverless `
>> --region $REGION `
>> --query "{State:State,LastUpdateStatus:LastUpdateStatus,Reason:LastUpdateStatusReason}" `
>> --output table
+-----+-----+-----+
| GetFunctionConfiguration |
+-----+-----+-----+
| LastUpdateStatus | Reason | State |
+-----+-----+-----+
| Successful | None | Active |
+-----+-----+-----+
```



```
File Edit Selection View Go Run ... < -> Q docling-serverless
EXPLORER
> OPEN EDITORS
v DOCLING-SERVERLESS
  v cli
    cloud_proc.py
  infra
    ! docling-stack.yml
  lambda
    Dockerfile
    handler.py
    README.md
    requirements.txt
    lambda-trust.json
    response.json
    terminal_history.txt
OUTLINE

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\obini\Downloads\docling-serverless> aws lambda get-function-configuration --function-name docling-serverless --region $REGION --query "{State:State,LastUpdateStatus:LastUpdateStatus,Reason:LastUpdateStatusReason}" --output table
-----
| GetFunctionConfiguration |
+-----+-----+-----+
| LastUpdateStatus | Reason | State |
+-----+-----+-----+
| Successful | None | Active |
+-----+-----+-----+
PS C:\Users\obini\Downloads\docling-serverless> aws lambda invoke --function-name docling-serverless --region us-east-2 --payload "{}" response.json
{
  "StatusCode": 200,
  "ExecutedVersion": "$LATEST"
}
PS C:\Users\obini\Downloads\docling-serverless> type response.json
{"ok": true, "message": "Lambda is deployed. This function expects an S3 event with Records[]. Upload a .pdf/.docx into input/ in your bucket.", "expected": {"bucket": "<your-bucket>", "input_prefix": "input/", "output_prefix": "output/", "extensions": [".docx", ".pdf"]}}
PS C:\Users\obini\Downloads\docling-serverless> $REGION="us-east-2"
PS C:\Users\obini\Downloads\docling-serverless> $BUCKET="docling-serverless-$(Get-Random)"
PS C:\Users\obini\Downloads\docling-serverless> aws s3api create-bucket --bucket $BUCKET --region $REGION --create-bucket-configuration LocationConstraints=$REGION
An error occurred (AccessDenied) when calling the CreateBucket operation: User: arn:aws:iam::755716729753:user/cli-admin is not authorized to perform: s3:CreateBucket on resource: "arn:aws:s3:::docling-serverless-1675994197" because no identity-based policy allows the s3:CreateBucket action
PS C:\Users\obini\Downloads\docling-serverless> aws s3api list-buckets --query "Buckets[0].Name" --output table
```



```
File Edit Selection View Go Run ... < -> Q docling serverless
EXPLORER
> OPEN EDITORS
v DOCLING-SERVERLESS
  v cli
    cloud_proc.py
  infra
    ! docling-stack.yml
  lambda
    Dockerfile
    handler.py
    README.md
    requirements.txt
    lambda-trust.json
    response.json
    terminal_history.txt
OUTLINE
TIMELINE

infra > ! docling-stack.yml
35 Resources:
123 ConverterLogGroup:
125   Properties:
126     LogGroupName: !Sub "/aws/lambda/${ConverterFunction}"
127     RetentionInDays: !Ref LogRetentionDays
128
129 Outputs:
130 BucketNameOut:
131   Description: "S3 bucket for input/ and output/"
132   Value: !Ref BucketName
133
134 EcrRepoUri:
135   Description: "ECR repository URI (image already pushed here)"
136   Value: !Sub "${AWS::AccountId}.dkr.ecr.${AWS::Region}.amazonaws.com/${EcrRepoName}"
137
138 LambdaName:
139   Description: "Lambda function name"
140   Value: !Ref ConverterFunction
141
142
143

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\obini\Downloads\docling-serverless> $BUCKET_NAME="docling-converter-srikanth-$(Get-Random -Minimum 1000000 -Maximum 99999999)"
PS C:\Users\obini\Downloads\docling-serverless> $BUCKET_NAME
docling-converter-srikanth-17655252
PS C:\Users\obini\Downloads\docling-serverless>
```