LAMBDA TEST CODE

```
{
  "text": "Hello! This is a test of Amazon Polly text-to-speech service."
}
```

PYTHON CODE FOR LAMBDA

```python
import boto3
from datetime import datetime

# Initialize clients
s3_client = boto3.client("s3")
polly_client = boto3.client("polly")

# Set your output bucket name here (where audio files will be saved)
OUTPUT_BUCKET = "-----------"  # Enter your output bucket name

def lambda_handler(event, context):
    try:
        # Get the first record from the S3 event
        record = event['Records'][0]
        bucket_name = record['s3']['bucket']['name']    # Input bucket
        file_key = record['s3']['object']['key']        # Input file key

        # Read the uploaded text file from S3
        response = s3_client.get_object(Bucket=bucket_name, Key=file_key)
        text = response['Body'].read().decode('utf-8')

        # Convert text to speech using Polly
        audio = polly_client.synthesize_speech(
            Text=text,
            OutputFormat='mp3',   #You can change required output format type and voice type
            VoiceId='Joanna'
        )

        # Generate output filename
        output_key = f"speech_{file_key.split('/')[-1].replace('.txt', '.mp3')}"

        # Save the audio file to the output S3 bucket
        s3_client.put_object(
            Bucket=OUTPUT_BUCKET,
            Key=output_key,
```

```python
            Body=audio['AudioStream'].read()
        )

        print(f"Audio file saved: {OUTPUT_BUCKET}/{output_key}")
        return {"status": "success", "file": output_key}

    except Exception as e:
        print(f"Error: {str(e)}")
        return {"status": "error", "message": str(e)}
```

IAM POLICIES

```json
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "s3:GetObject"
      ],
      "Resource": "arn:aws:s3:::-----------/*" #Enter your input bucket name
    },
    {
      "Effect": "Allow",
      "Action": [
        "s3:PutObject"
      ],
      "Resource": "arn:aws:s3:::------------/*" #Enter your output bucket name
    },
    {
      "Effect": "Allow",
      "Action": [
        "polly:SynthesizeSpeech"
      ],
      "Resource": "*"
    }
  ]
}
```