# Deploying HVP Model:

Please follow the instructions below to deploy the **HVP Personality Trait Prediction** model using AWS Lambda.

**Step 1: Set Up the S3 Bucket**

1. Create an S3 bucket to store the model and dataset files (e.g., my-model-bucket).
2. Upload the following files to your S3 bucket:
   * **Model file**: my\_pipeline.pkl
   * **Dataset file**: combined\_hvp\_numeric.xlsx

**Step 2: Create the Lambda Function**

1. Go to the [AWS Lambda Console](https://console.aws.amazon.com/lambda/home).
2. Create a new Lambda function with the following settings:
   * **Function name**: hvp-personality-prediction
   * **Runtime**: Python 3.12
   * **Execution role**: Choose **Create a new role with basic Lambda permissions**.

**Step 3: Add IAM Permissions**  
Attach the following policy to the Lambda execution role to allow access to S3:

{

"Version": "2012-10-17",

"Statement": [

{

"Effect": "Allow",

"Action": ["s3:GetObject"],

"Resource": "arn:aws:s3:::your-bucket-name/\*"

}

]}

**Step 4: Add Environment Variables**

1. In the Lambda function configuration, go to **Environment variables** and add the following variables:
   * MODEL\_BUCKET\_NAME: your-bucket-name
   * MODEL\_FILE\_KEY: path/to/my\_pipeline.pkl
   * DATASET\_FILE\_KEY: path/to/combined\_hvp\_numeric.xlsx

**Step 5: Upload the Lambda Function Code**

1. Copy and paste the **lambda\_function.py** code into the Lambda function editor.
2. Upload any required dependencies (e.g., joblib, scikit-learn, etc.) if necessary.

**Step 6: Test the Lambda Function**

1. Create a **Test Event** in the Lambda console with the following JSON:

{

"text": "I am very outgoing and love socializing with people."

}

1. Click **Test** to verify the function works correctly.

**Step 7: (Optional) Set Up API Gateway**

1. If you need to expose this Lambda function as a web API, follow these instructions to set up **API Gateway**:
   * Create a new REST API and link it to your Lambda function.