**MODEL DEPLOYMENT PLAN**

**Tool Used: -** **AWS SAGEMAKER**

**STEPS TO DEPLOY MODEL: -**

1. **Setup**

Specify AWS region, IAM role, and S3 bucket for training and model data.

1. **Prepare Data for Model Inference**

Load the dataset.

1. **Download pre-trained Model**

Fetch a pre-trained Scikit-Learn model trained using the dataset.

1. **Compress Model File**

Compress the model file to a GZIP tar archive format adhering to the specified naming pattern.

1. **Upload Model to S3**

Upload the compressed model file (model.tar.gz) to an S3 bucket.

1. **Set Up Hosting**

Create a SageMaker model using the model file uploaded to S3.

1. **Write Inference Script**

Develop an inference script (inference.py) at the root of the 'code' directory, implementing functions for model loading and inference logic.

1. **Install Python Dependencies**

Provide a 'requirements.txt' file to install additional dependencies like boto3, sagemaker, requests, and nltk etc into the container.

1. **Deploy with Python SDK**

Demonstrate the process of creating a model from S3 artifacts using Python SDK for deployment.

1. **Create Endpoint**

Establish an endpoint using the defined configuration and model.

1. **Validate Model Use**

Obtain the endpoint from the client library and generate classifications using the model endpoint.

1. **Invoke with Python SDK**

Generate predictions for a single data point using either CSV or NPY serialization methods.

1. **Conclusion:**

Summarize the deployment of a pre-trained Scikit-Learn model in SageMaker and the subsequent invocation using Python SDK.

1. **Deployment of Pre-trained Model**

Successfully deployed a pre-trained Scikit-Learn model using the Amazon SageMaker Scikit-Learn container.

So, these are the steps to deploy the model.