**Lab 4: Training a Model with Automated ML in Azure Machine Learning Studio**

**Objective**

Learn how to use Automated ML in Azure Machine Learning Studio to train a model efficiently, using multiple algorithms and parameters to find the best model based on performance.

**Instructions**

1. **Accessing Automated ML:**
   * Open Azure Machine Learning Studio.
   * Navigate to the **Automated ML** option under the **Authoring** section.
2. **Starting a New Automated ML Job:**
   * Click on **New Automated ML run**.
   * Select the dataset titled "Telco Customer Churn" that you uploaded in the previous lab.
3. **Configuring the Automated ML Job:**
   * Enter a name for the new experiment in the **New experiment name** field.
   * Specify the **Target column** for prediction. For this dataset, use the column labeled **Churn**.
4. **Setting Up Compute Resources:**
   * Choose the **Compute cluster** option for the training.
   * Click on **New** to create a new compute cluster.
   * Select **Standard\_DS11\_v2** for the machine size.
   * Set the **Minimum number of nodes** to 0 and the **Maximum number of nodes** to 2.
5. **Choosing the Algorithm Category:**
   * Move to the **Select task and settings** screen.
   * Since you are predicting whether customers will churn (a binary outcome), select **Classification** as the category of algorithms.
6. **Configuring Additional Settings:**
   * In the **Additional configurations**, set the **Training job time (hours)** under **Exit criterion** to 1 hour to limit the duration of the training process.
7. **Launching the Automated ML Job:**
   * Confirm all settings are correct and start the Automated ML job.
   * Monitor the progress of the model's training in the **Automated ML** section under the job you just created.

**Monitoring and Evaluation**

* As the Automated ML process runs, it will evaluate multiple models using different algorithms and parameters.
* Once the training completes, review the performance metrics provided by the best-performing models.
* Consider the implications of the model's accuracy, precision, and recall, especially in the context of predicting customer churn.