



# CDW Documentation

## Azure ML Pipeline Test

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## Purpose

Test deployment of Azure ML Pipeline and look at outputs and download trained model.

## Key Things Learned

1. When you create train.py and prep.py or any other environment files, they should be stored under ./src in your notebook directory.
2. You need to understand a bit of what you are trying to have it do as it can't think or make suppositions in a normal way. Garbage in, garbage out.

## Final Code

train.py

```
import pandas as pd
import argparse
import os
from sklearn.linear_model import LogisticRegression
import joblib

def main():
    parser = argparse.ArgumentParser()
    parser.add_argument("--training_data", type=str)
    parser.add_argument("--model_output", type=str)
    args = parser.parse_args()

    df = pd.read_csv(os.path.join(args.training_data, "prepped.csv"))
    X = df[["feature1", "feature2", "feature_sum"]]
    y = df["label"]

    model = LogisticRegression()
    model.fit(X, y)

    os.makedirs(args.model_output, exist_ok=True)
    joblib.dump(model, os.path.join(args.model_output, "model.joblib"))

if __name__ == "__main__":
    main()
print("Model output path:", args.model_output)
print("Directory contents after writing:")
print(os.listdir(args.model_output))
print("Writing model to:", args.model_output)
```

```
print("Files in output dir:", os.listdir(args.model_output))
```

NOTE: The print statements on the end were for troubleshooting and shouldn't be there for production runs.

prep.py

```
import pandas as pd
import argparse
import os

def main():
    parser = argparse.ArgumentParser()
    parser.add_argument("--input_data", type=str)
    parser.add_argument("--output_data", type=str)
    args = parser.parse_args()

    df = pd.read_csv(args.input_data)
    df["feature_sum"] = df["feature1"] + df["feature2"]
    os.makedirs(args.output_data, exist_ok=True)
    df.to_csv(os.path.join(args.output_data, "prepped.csv"), index=False)

if __name__ == "__main__":
    main()
```

deployment\_script.py

NOTE: This is ran from the Notebook, not from a python script. At least not without changes.

[AI Knowledge](#)