

```
import subprocess
```

```
from typing import Any, Dict, List
```

```
from swarms.utils.loguru_logger import initialize_logger
```

```
from pydantic import BaseModel
```

```
from swarms.structs.agent import Agent
```

```
logger = initialize_logger(log_folder="pandas_utils")
```

```
try:
```

```
    import pandas as pd
```

```
except ImportError:
```

```
    logger.error("Failed to import pandas")
```

```
    subprocess.run(["pip", "install", "pandas"])
```

```
    import pandas as pd
```

```
def display_agents_info(agents: List[Agent]) -> None:
```

```
    """
```

```
    Displays information about all agents in a list using a DataFrame.
```

```
    :param agents: List of Agent instances.
```

```
    """
```

```
    # Extracting relevant information from each agent
```

```

agent_data = []

for agent in agents:
    try:
        agent_info = {
            "ID": agent.id,
            "Name": agent.agent_name,
            "Description": agent.description,
            "max_loops": agent.max_loops,
            # "Docs": agent.docs,
            "System Prompt": agent.system_prompt,
            "LLM Model": agent.llm.model_name, # type: ignore
        }
        agent_data.append(agent_info)
    except AttributeError as e:
        logger.error(
            f"Failed to extract information from agent {agent}: {e}"
        )
        continue

# Creating a DataFrame to display the data

try:
    df = pd.DataFrame(agent_data)
except Exception as e:
    logger.error(f"Failed to create DataFrame: {e}")

return

```

```
# Displaying the DataFrame
```

```
try:
```

```
    print(df)
```

```
except Exception as e:
```

```
    logger.error(f"Failed to print DataFrame: {e}")
```

```
def dict_to_dataframe(data: Dict[str, Any]) -> pd.DataFrame:
```

```
    """
```

```
    Converts a dictionary into a pandas DataFrame.
```

```
:param data: Dictionary to convert.
```

```
:return: A pandas DataFrame representation of the dictionary.
```

```
    """
```

```
# Convert dictionary to DataFrame
```

```
df = pd.json_normalize(data)
```

```
return df
```

```
def pydantic_model_to_dataframe(model: BaseModel) -> pd.DataFrame:
```

```
    """
```

```
    Converts a Pydantic Base Model into a pandas DataFrame.
```

```
:param model: Pydantic Base Model to convert.
```

```
:return: A pandas DataFrame representation of the Pydantic model.
```

```
    """
```

```
# Convert Pydantic model to dictionary
```

```
model_dict = model.dict()
```

```
# Convert dictionary to DataFrame
```

```
df = dict_to_dataframe(model_dict)
```

```
return df
```