

```
import os
```

```
from swarms import Agent
```

```
from swarm_models import OpenAIChat
```

```
from examples.structs.swarms.experimental.dfs_search_swarm import (  
    DFSSwarm,  
)
```

```
# Get the OpenAI API key from the environment variable
```

```
api_key = os.getenv("OPENAI_API_KEY")
```

```
# Create an instance of the OpenAIChat class for each agent
```

```
model = OpenAIChat(  
    api_key=api_key, model_name="gpt-4o-mini", temperature=0.1  
)
```

```
# Initialize multiple agents
```

```
agent1 = Agent(  
    agent_name="Agent-1",  
    system_prompt="Analyze the financial components of a startup's stock incentives.",  
    llm=model,  
    # max_loops=2,  
    # autosave=True,  
    dynamic_temperature_enabled=True,  
    verbose=True,  
    streaming_on=True,
```

```
    user_name="swarms_corp",  
)  

```

```
agent2 = Agent(  
    agent_name="Agent-2",  
    system_prompt="Refine the analysis and identify any potential risks or benefits.",  
    llm=model,  
    # max_loops=2,  
    # autosave=True,  
    dynamic_temperature_enabled=True,  
    verbose=True,  
    streaming_on=True,  
    user_name="swarms_corp",  
)  

```

```
# Add more agents as needed
```

```
# agent3 = ...
```

```
# agent4 = ...
```

```
# Create the swarm with the agents
```

```
dfs_swarm = DFSSwarm(agents=[agent1, agent2])
```

```
# Run the DFS swarm on a task
```

```
result = dfs_swarm.run(  
    "Start with analyzing the financial components of a startup's stock incentives."  
)  

```

```
print("Final Result:", result)
```