

```
from typing import Annotated
```

```
from swarms import create_openai_tool
```

```
from openai import OpenAI
```

```
# Create an instance of the OpenAI client
```

```
client = OpenAI()
```

```
# Define the user messages for the chat conversation
```

```
messages = [
```

```
{
```

```
    "role": "user",
```

```
    "content": "What's the weather like in San Francisco, Tokyo, and Paris?",
```

```
}
```

```
]
```

```
# Define the BMI calculator tool using the create_openai_tool decorator
```

```
@create_openai_tool(
```

```
    name="BMI Calculator",
```

```
    description="Calculate the Body Mass Index (BMI)",
```

```
)
```

```
def calculate_bmi(
```

```
    weight: Annotated[float, "Weight in kilograms"],
```

```
    height: Annotated[float, "Height in meters"],
```

```
) -> Annotated[float, "Body Mass Index"]:
```

```
    """Calculate the Body Mass Index (BMI) given a person's weight and height."""
```

```
return weight / (height**2)
```

```
# Create a chat completion request using the OpenAI client
```

```
response = client.chat.completions.create(  
    model="gpt-3.5-turbo-0125",  
    messages=messages,  
    tools=calculate_bmi,  
    tool_choice="auto", # auto is default, but we'll be explicit  
)
```

```
# Print the generated response from the chat completion
```

```
print(response.choices[0].message["content"])
```