

```
#pip install pyowm
```

Weather information: pyowm package allows you to retrieve weather information from OpenWeatherMap

Email sending: smtplib package provides functionalities for sending emails using the Simple Mail Transfer Protocol (SMTP). It is a built-in package in Python, so no additional installation is required.

```
#pip install beautifulsoup4
```

Web scraping: beautifulsoup4 package is commonly used for web scraping tasks.

```
#pip install pymysql
```

Database interaction: pymysql package is useful for interacting with MySQL databases.

File handling: The built-in os and shutil packages provide functionalities for file and directory operations. No additional installation is required.

API requests: requests package is commonly used for making HTTP requests to APIs.

```
#pip install requests
```

These are just a few examples of packages that can enhance the capabilities of your Alexa implementation. Depending on the specific tasks and functionalities you want to incorporate, you may need to explore and install additional packages.

```
import speech_recognition as sr
import pyttsx3
import pywhatkit
import datetime
import wikipedia
import pyjokes
import pyowm
import requests
from bs4 import BeautifulSoup
```

```
listener = sr.Recognizer()
engine = pyttsx3.init()
voices = engine.getProperty('voices')
engine.setProperty('voice', voices[1].id)
```

```
owm = pyowm.OWM('fb664ba308d7229bcag8fbca230f2aad')
```

```
def talk(text):
    engine.say(text)
    engine.runAndWait()
```

```
def take_command():
    command = ""
    try:
        with sr.Microphone() as source:
```

```

    print('listening...')
    voice = listener.listen(source)
    command = listener.recognize_google(voice)
    command = command.lower()
    if 'alexa' in command:
        command = command.replace('alexa', '')
        print(command)
except:
    pass
return command

```

```

def run_alexa():
    command = take_command()
    print(command)
    if 'play' in command:
        song = command.replace('play', '')
        talk('playing ' + song)
        pywhatkit.playonyt(song)
    elif 'time' in command:
        time = datetime.datetime.now().strftime('%I:%M %p')
        talk('Current time is ' + time)
    elif 'who the heck is' in command:
        person = command.replace('who the heck is', '')
        info = wikipedia.summary(person, 1)
        print(info)
        talk(info)
    elif 'joke' in command:
        talk(pyjokes.get_joke())
    elif 'weather' in command:
        try:
            observation = owm.weather_at_place('New York, US')
            weather = observation.get_weather()
            temperature = weather.get_temperature('celsius')['temp']
            status = weather.get_status()
            talk(f"The weather is currently {status} with a temperature of {temperature} degrees Celsius.")
        except:
            talk("Sorry, I couldn't retrieve the weather information.")
    elif 'news' in command:
        try:
            url = 'https://newsapi.org/v2/top-headlines?country=us&apiKey=your_newsapi_key'
            response = requests.get(url)
            news = response.json()
            articles = news['articles']
            talk("Here are the top headlines:")
            for article in articles[:5]:
                talk(article['title'])

```

```
except:
    talk("Sorry, I couldn't fetch the latest news.")
else:
    talk('Please say the command again.')

while True:
    run_alexas()
```

Command: "Alexa, play Despacito"

Action: The chat bot will play the song "Despacito" on YouTube.

Command: "Alexa, what's the time?"

Action: The chat bot will respond with the current time.

Command: "Alexa, who the heck is Albert Einstein?"

Action: The chat bot will provide a brief summary of Albert Einstein from Wikipedia.

Command: "Alexa, tell me a joke."

Action: The chat bot will tell a random joke.

Command: "Alexa, what's the weather like?"

Action: The chat bot will retrieve the current weather information for New York, US, and provide the weather status and temperature.

Command: "Alexa, what are the latest news headlines?"

Action: The chat bot will fetch the top headlines from the news and read out the titles of the five latest news articles.