# Extracting JSON Data from the Internet into R

This document provides an example of how to extract JSON data from an online API and load it into R. We will use the OpenWeather API to fetch current weather data for a specified city. You need to sign up for an API key at https://openweathermap.org/api.

## Step-by-Step Instructions

1. Install Required Libraries: Ensure you have the necessary libraries installed.  
2. Fetch JSON Data: Use the `httr` library to make a GET request to the API.  
3. Parse JSON Data: Use the `jsonlite` library to parse the JSON response into an R data frame.

## R Code Example

Here’s how to extract JSON data from the OpenWeather API and load it into R:  
  
```r  
# Install required libraries if you haven't already  
install.packages("httr")  
install.packages("jsonlite")  
  
# Load the libraries  
library(httr)  
library(jsonlite)  
  
# Define the API endpoint URL and your API key  
api\_key <- "your\_api\_key" # Replace with your actual API key  
city <- "London"  
url <- paste0("http://api.openweathermap.org/data/2.5/weather?q=", city, "&appid=", api\_key)  
  
# Make a GET request to the API  
response <- GET(url)  
  
# Check if the request was successful  
if (status\_code(response) == 200) {  
 # Parse the JSON content  
 data <- content(response, "text")  
 parsed\_data <- fromJSON(data, flatten = TRUE)  
   
 # Extract the data into a data frame  
 weather\_data <- as.data.frame(parsed\_data)  
   
 # Print the first few rows of the data frame  
 print(weather\_data)  
} else {  
 # Print an error message if the request failed  
 print(paste("Failed to fetch data. Status code:", status\_code(response)))  
}  
```  
  
Replace `"your\_api\_key"` with your actual API key obtained from OpenWeather. This code fetches the current weather data for London and prints it as a data frame. You can change the `city` variable to fetch weather data for a different location.