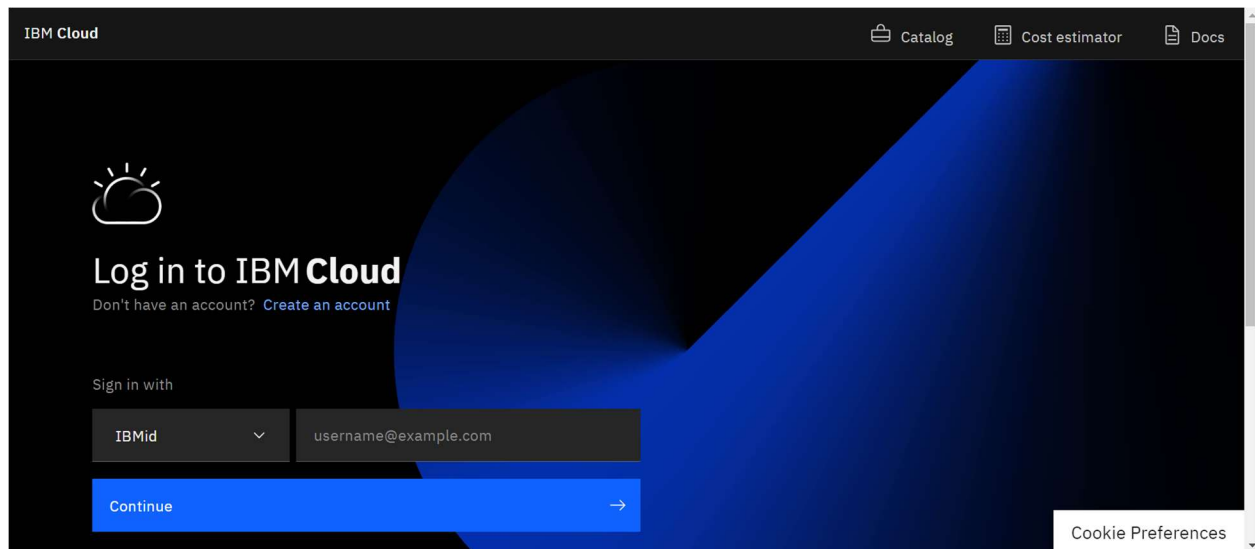
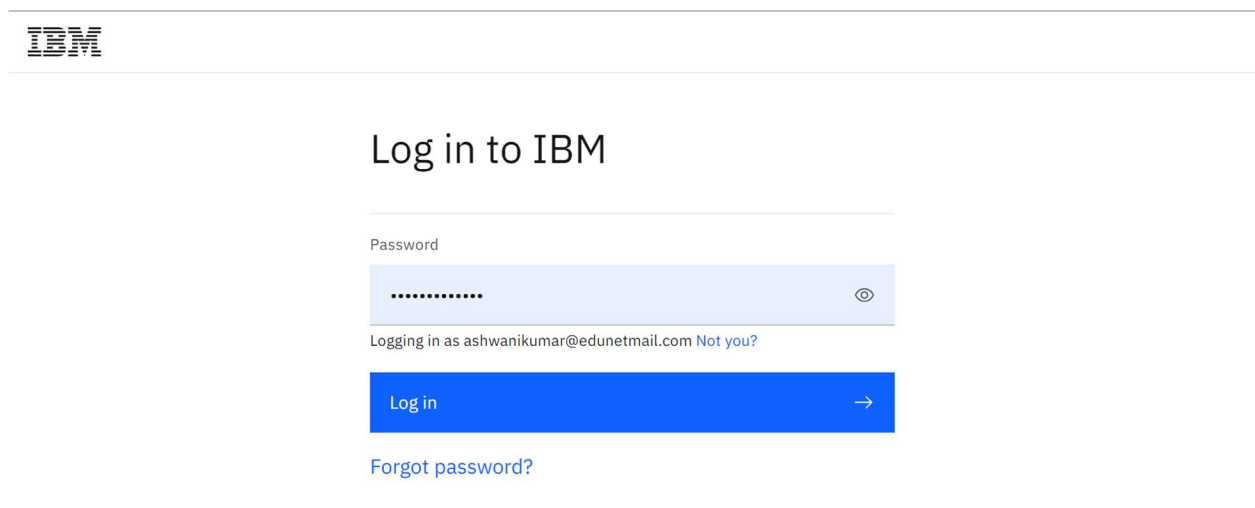


Natural Language Understanding in IBM Cloud

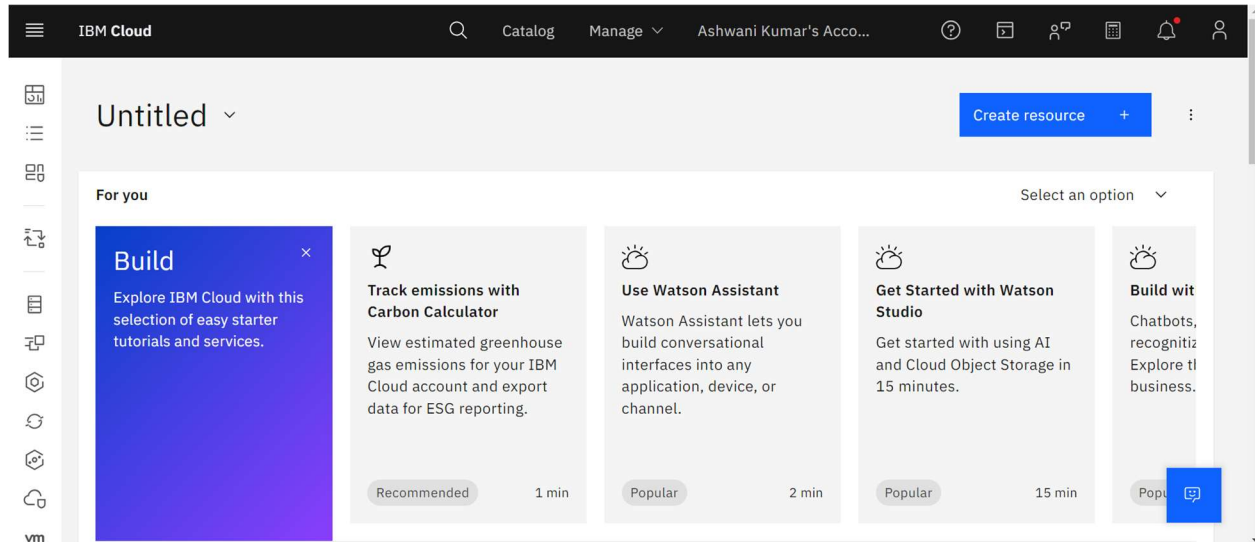
Step1 : Login into IBM cloud using this link cloud.ibm.com



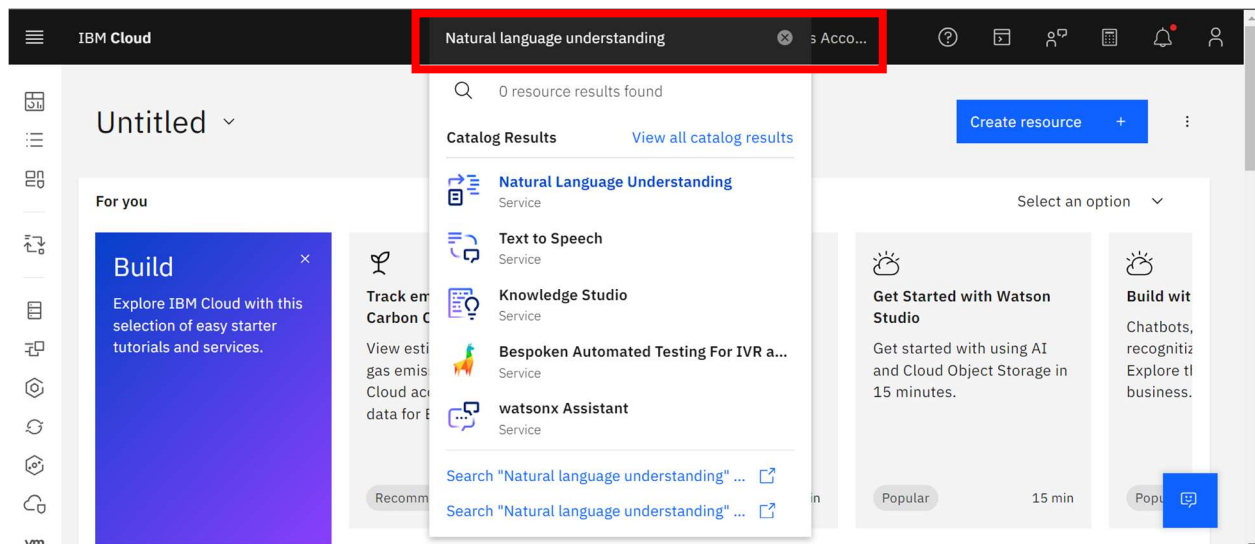
Step2 : Enter your credentials and login.



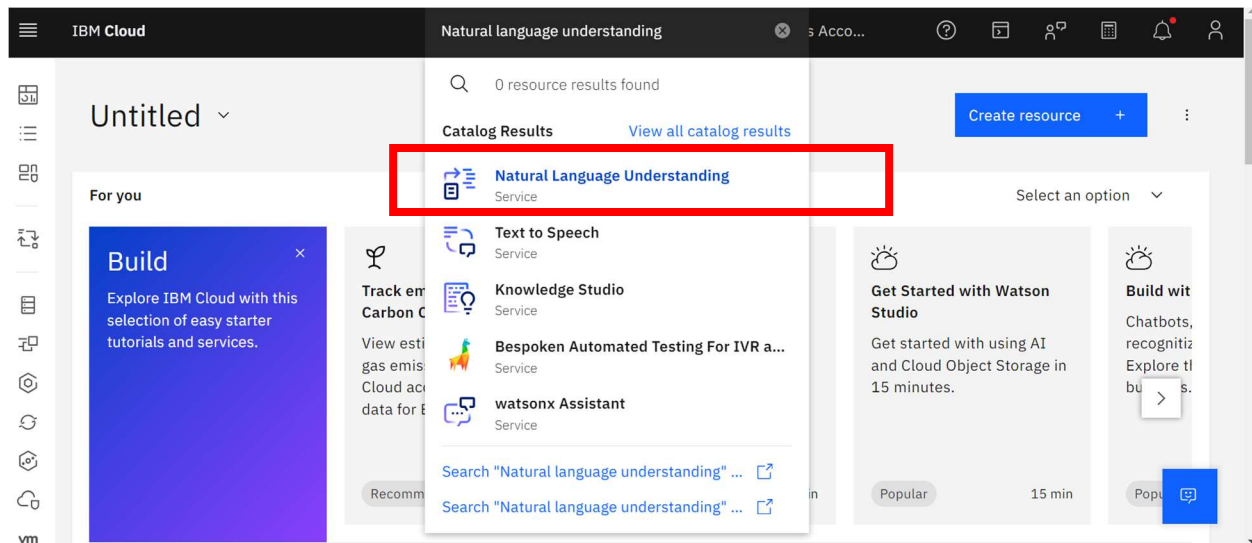
Step3 : This is your IBM Cloud Dashboard.



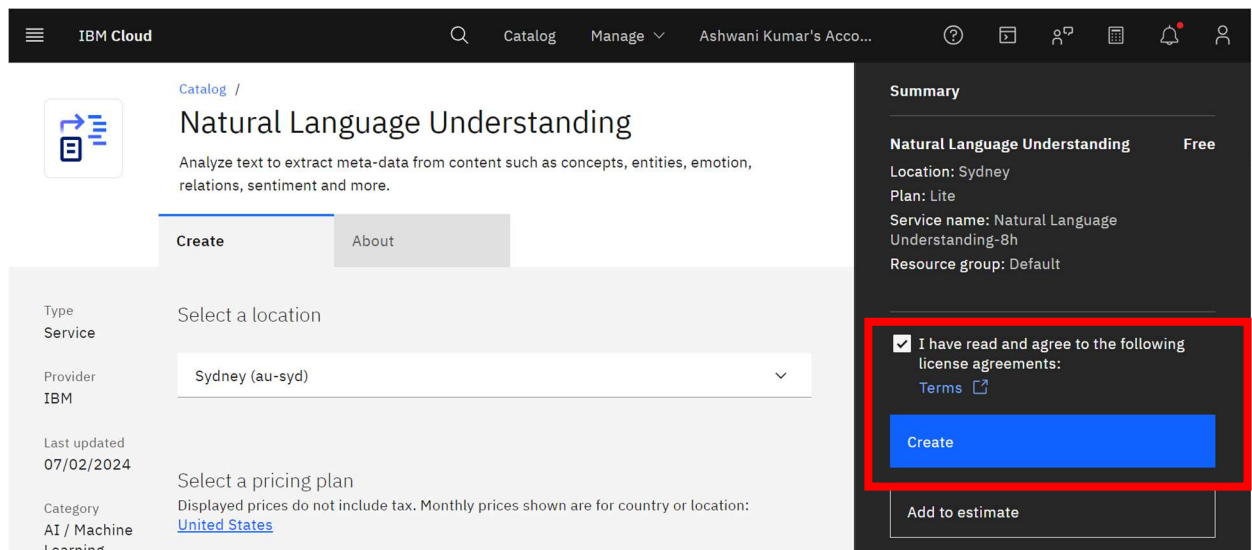
Step4 : Click on search icon and type “Natural language understanding.”



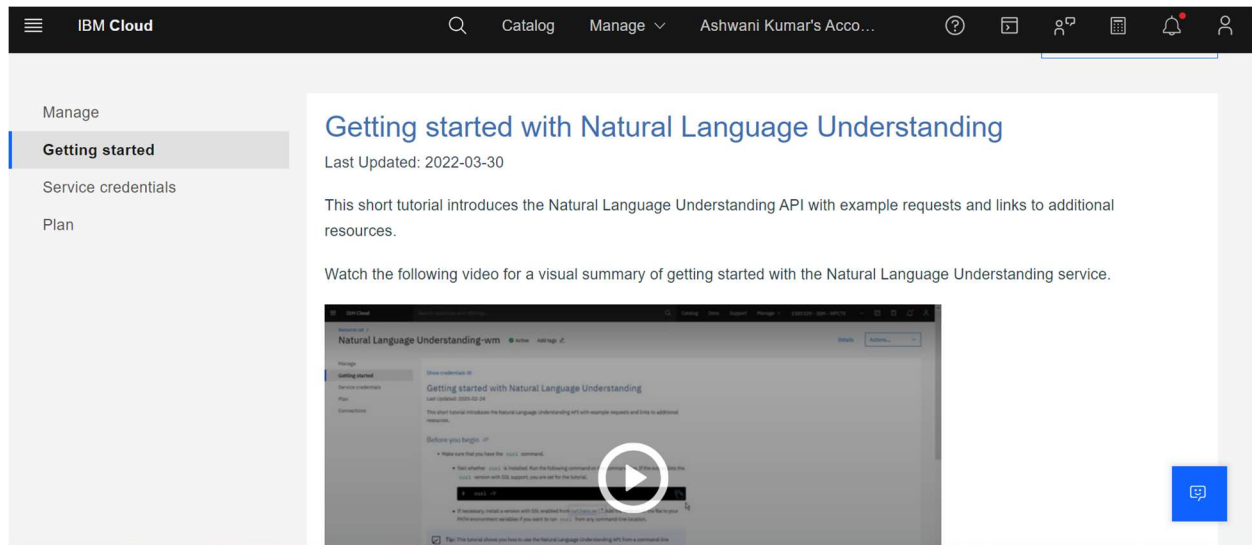
Step5 : Select Natural language understanding service.



Step6 : click on checkbox and click on Create.

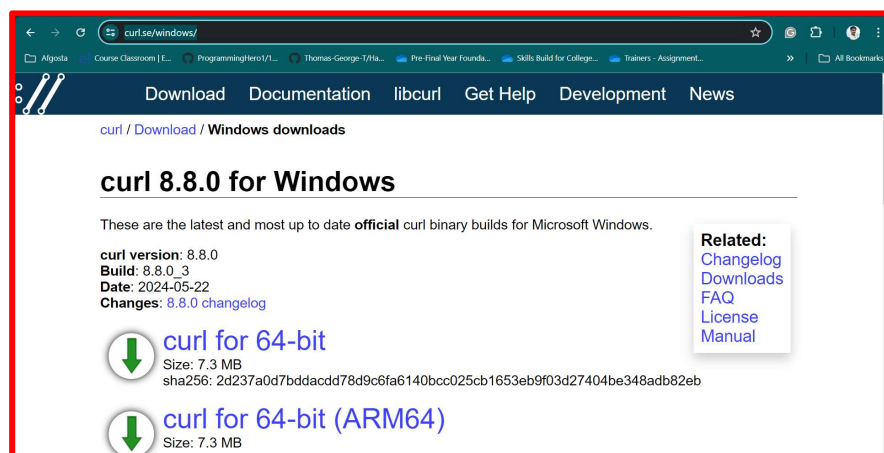


Step7 : scroll this page a little and watch video.

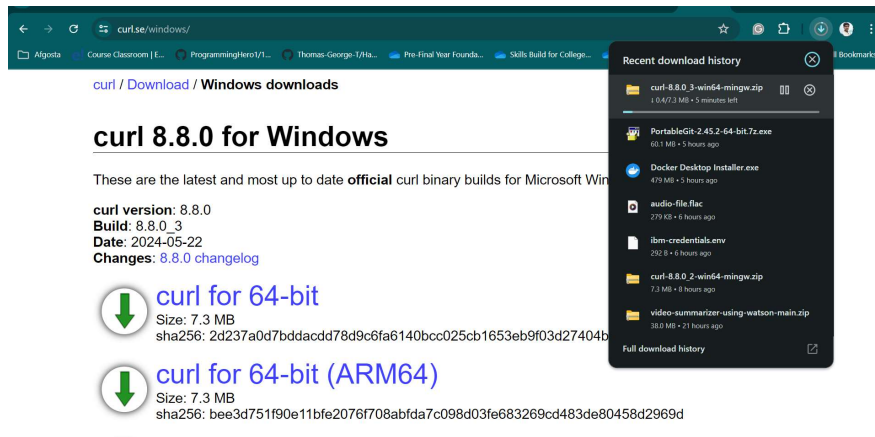


Step 8: Install the curl into your system using this link <https://curl.se/windows/>

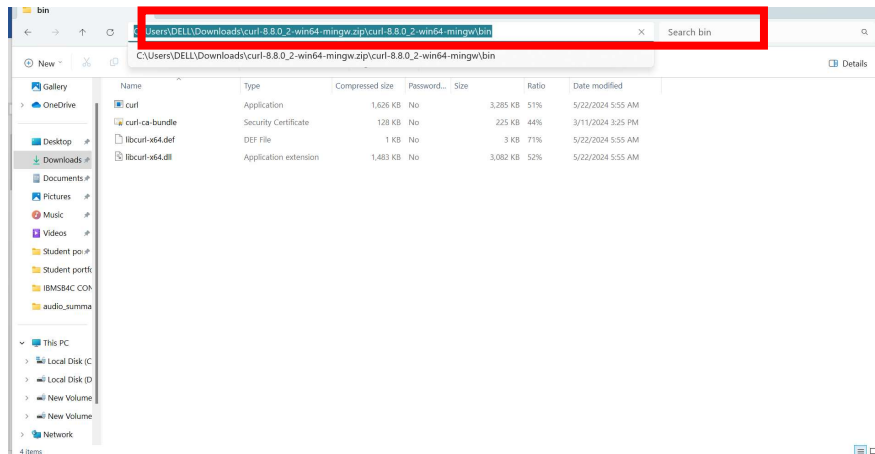
Click on “curl for 64 – bit”



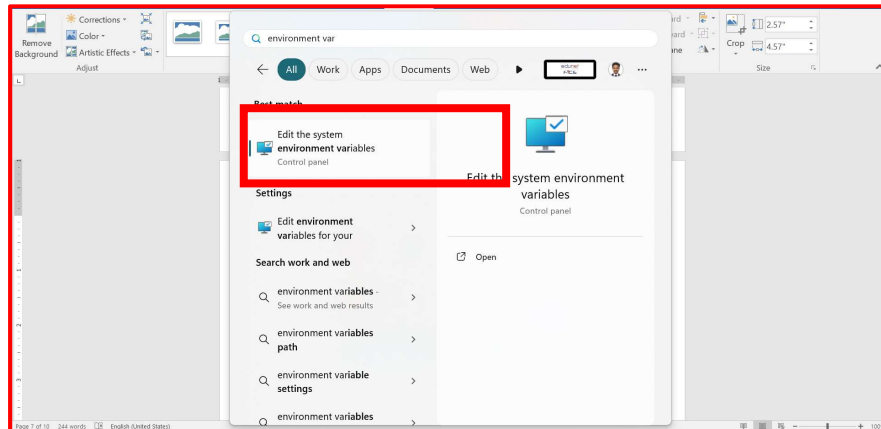
Step9: Curl file is downloading



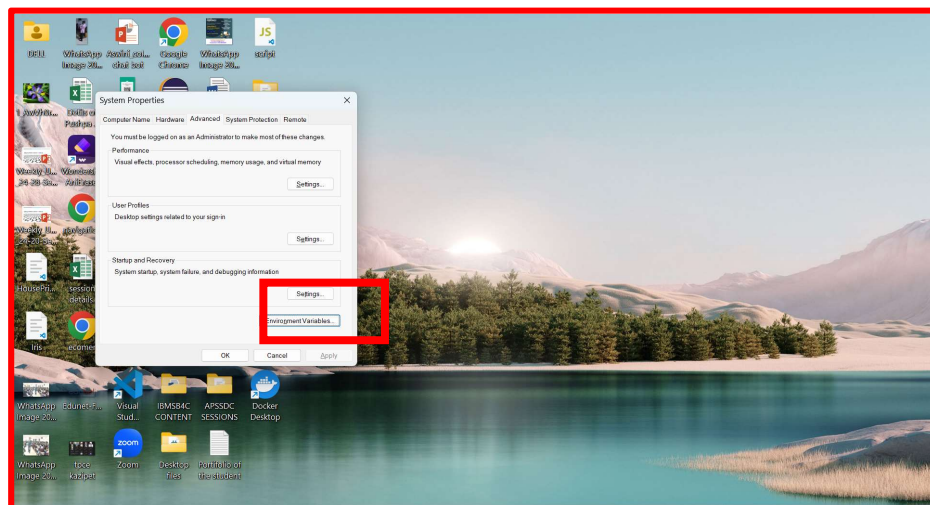
Step10 : Open the downloaded folder , in that open “bin” folder and copy the path.



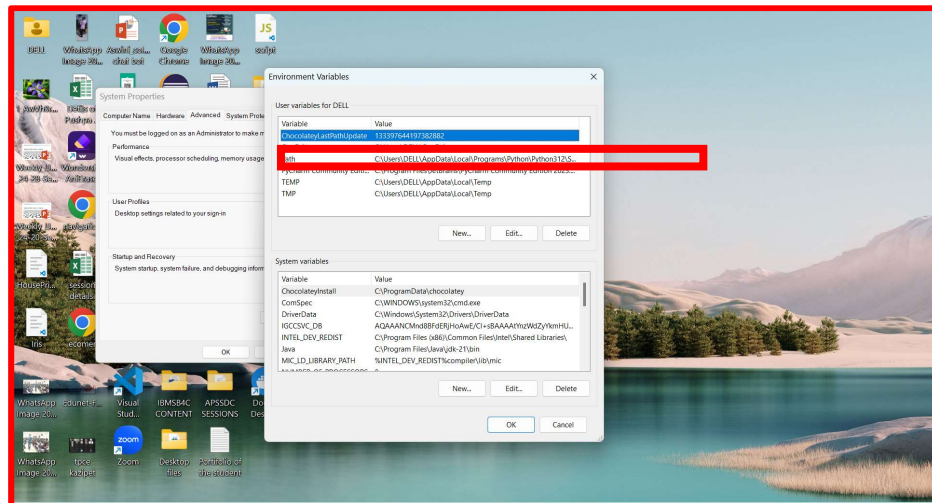
Step11: Click on search icon and type environment variables. Open it



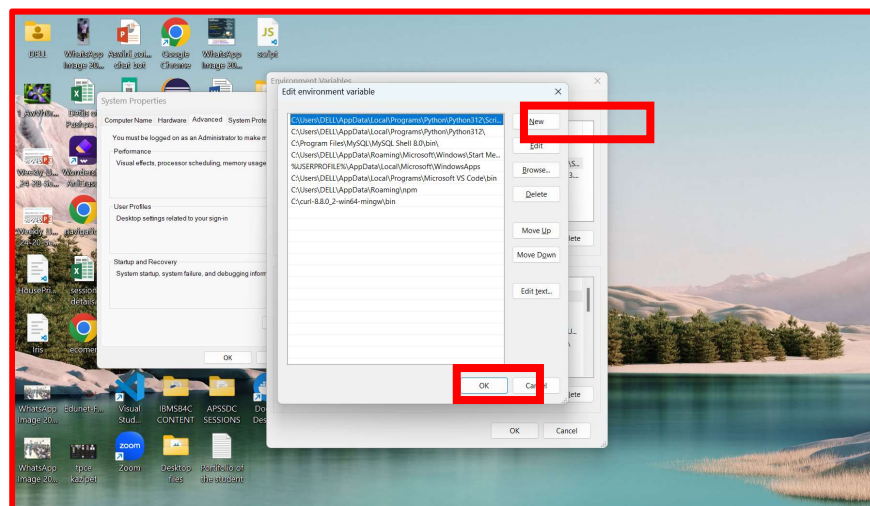
Step12: click on environment variables.



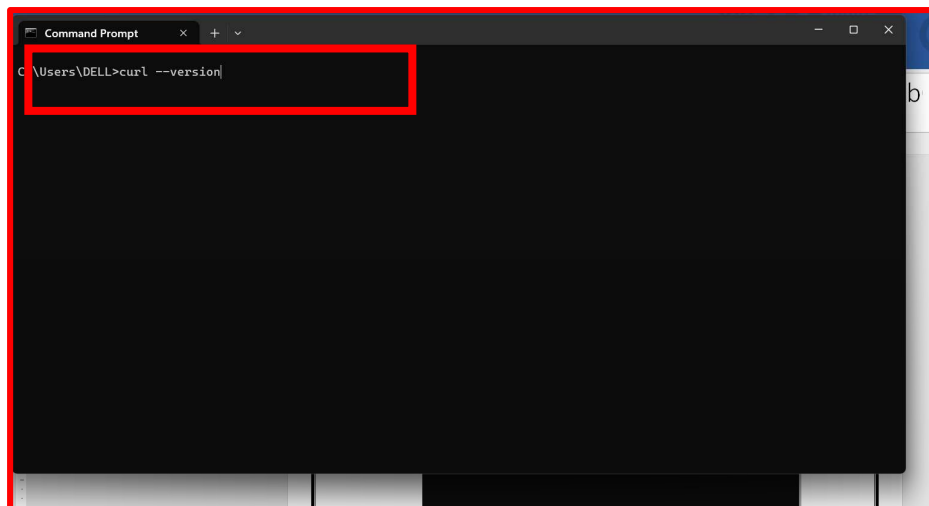
Step13: Double click on path.



Step14: Click on New and paste the copied path of curl bin folder and click on OK

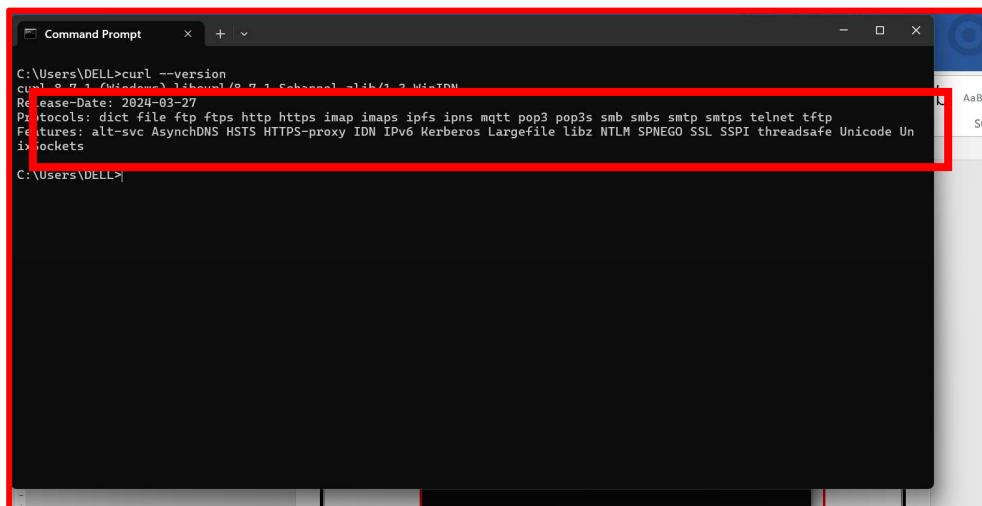


Step15: Open the Command Prompt and type curl --version curl



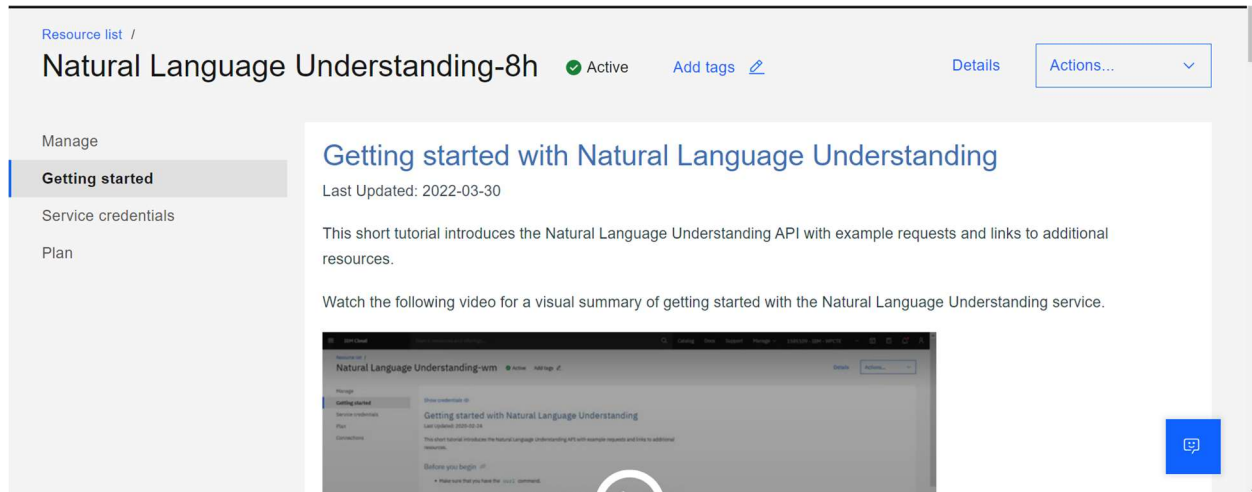
```
Command Prompt
C:\Users\DELL>curl --version
```

Step 16 : Curl installed successfully.

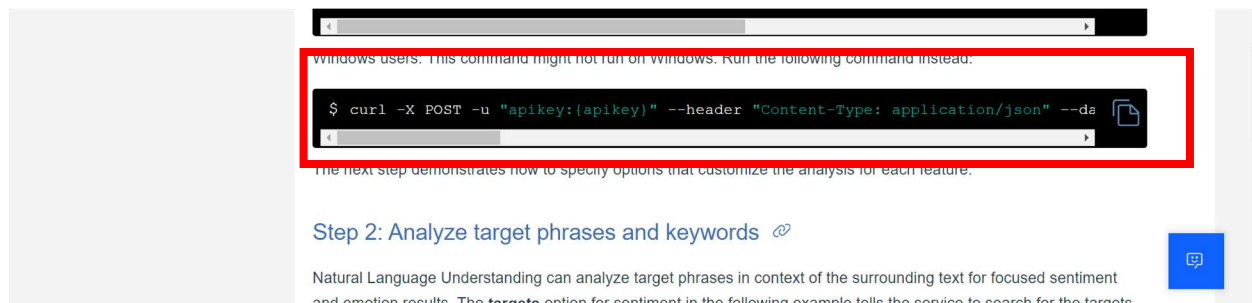


```
Command Prompt
C:\Users\DELL>curl --version
curl 8.7.1 (aarch64-linux-gnu) libcurl/8.7.1 OpenSSL/3.1.3 WinTLS/
Release-Date: 2024-03-27
Protocols: dict file ftp ftps http https imap imaps ipfs ipns mqtt pop3 pop3s smb smbs smtp smtps telnet tftp
Features: alt-svc AsynchDNS HSTS HTTPS-proxy IDN IPv6 Kerberos Largefile libz NTLM SPNEGO SSL SSPI threadsafe Unicode Un
ix sockets
C:\Users\DELL>
```

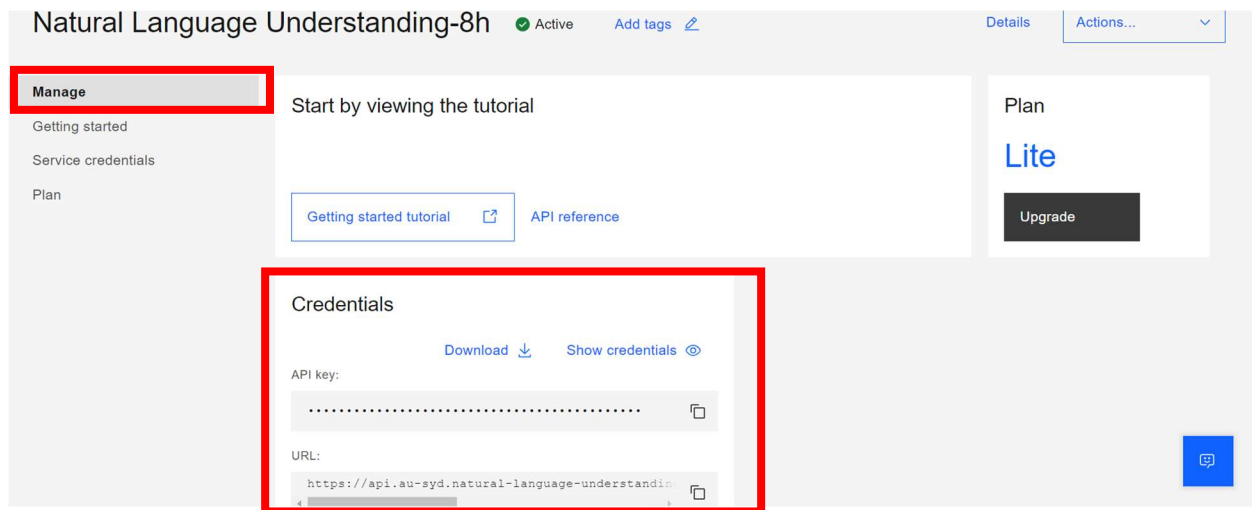

Step17 : go to this page and scroll a little this page.



Step18 : Copy this command and paste it in notepad.



Step19 : Click on Manage and copy Api key and URL



Step20 : Replace API Key and URL in copied command

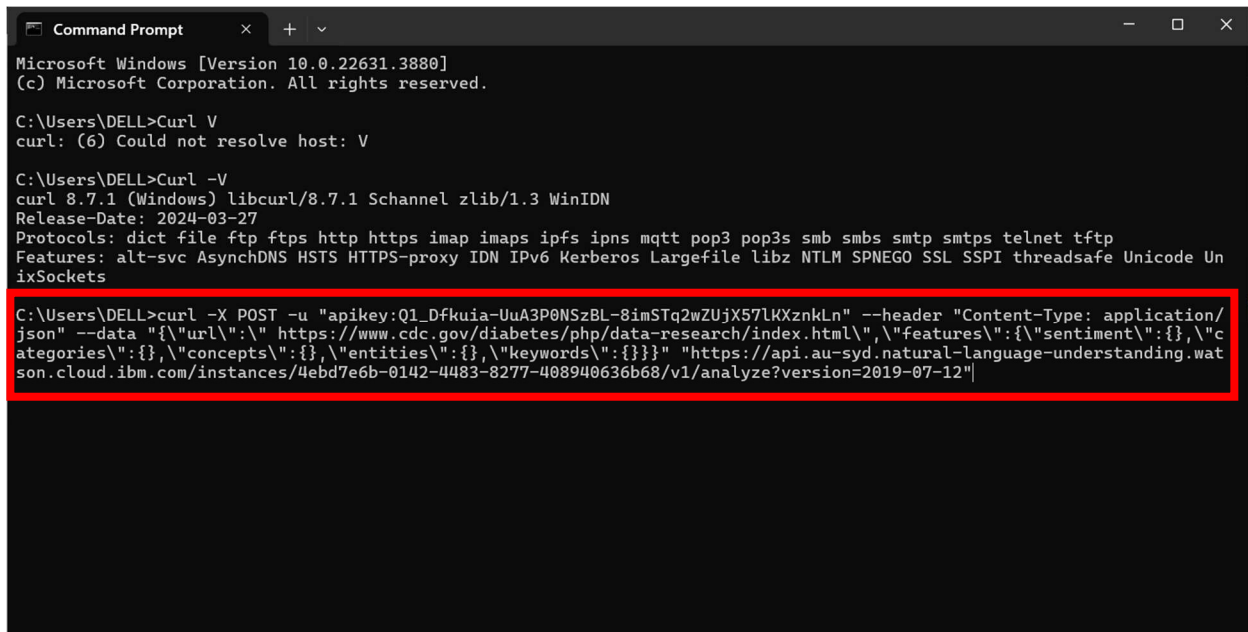
```
curl -X POST -u "apikey:{apikey}" --header "Content-Type: application/json" --data '{"url": "http://newsroom.ibm.com/Guerbet-and-IBM-Watson-Health-Announce-Strategic-Partnership-for-Artificial-Intelligence-in-Medical-Imaging-Liver", "features": {"sentiment": {}, "categories": {}, "concepts": {}, "entities": {}, "keywords": {}}}' "{url}/v1/analyze?version=2019-07-12"
```

Step21 : Now, Replace this webpage URL in above command.

<https://www.cdc.gov/diabetes/php/data-research/index.html>

```
curl -X POST -u "apikey:{apikey}" --header "Content-Type: application/json" --data '{"url": "https://www.cdc.gov/diabetes/php/data-research/index.html", "features": {"sentiment": {}, "categories": {}, "concepts": {}, "entities": {}, "keywords": {}}}' "{url}/v1/analyze?version=2019-07-12"
```

Step22 :Copy above command and paste it in command prompt and click enter.



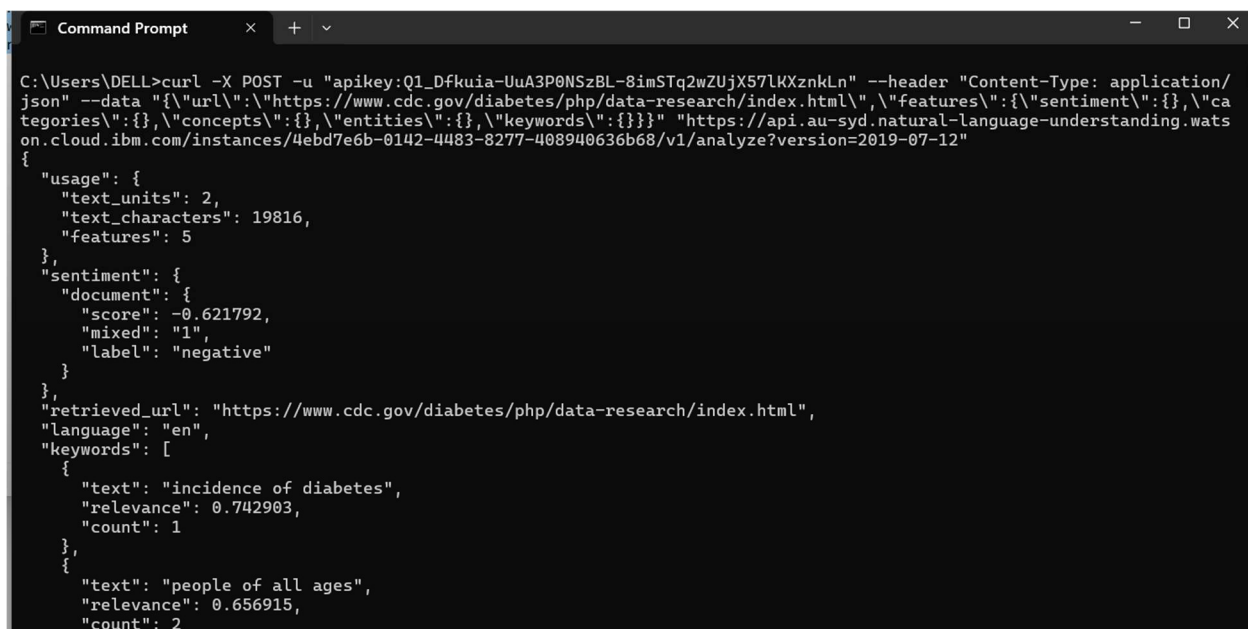
```
Microsoft Windows [Version 10.0.22631.3880]
(c) Microsoft Corporation. All rights reserved.

C:\Users\DELL>Curl V
curl: (6) Could not resolve host: V

C:\Users\DELL>Curl -V
curl 8.7.1 (Windows) libcurl/8.7.1 Schannel zlib/1.3 WinIDN
Release-Date: 2024-03-27
Protocols: dict file ftp ftps http https imap imaps ipfs ipns mqtt pop3 pop3s smb smbs smtp smtps telnet tftp
Features: alt-svc AsynchDNS HSTS HTTPS-proxy IDN IPv6 Kerberos Largefile libz NTLM SPNEGO SSL SSPI threadsafe Unicode UnixSockets

C:\Users\DELL>curl -X POST -u "apikey:Q1_Dfkuia-UuA3P0NSzBL-8imSTq2wZUjX57LkXznkLn" --header "Content-Type: application/json" --data '{"url":"https://www.cdc.gov/diabetes/php/data-research/index.html","features":{"sentiment":{"categories":{"concepts":{"entities":{"keywords":{"https://api.au-syd.natural-language-understanding.watson.cloud.ibm.com/instances/4ebd7e6b-0142-4483-8277-408940636b68/v1/analyze?version=2019-07-12"}}
```

Step22 :This is the output, we analyzed sentiment analysis, categories of webpage



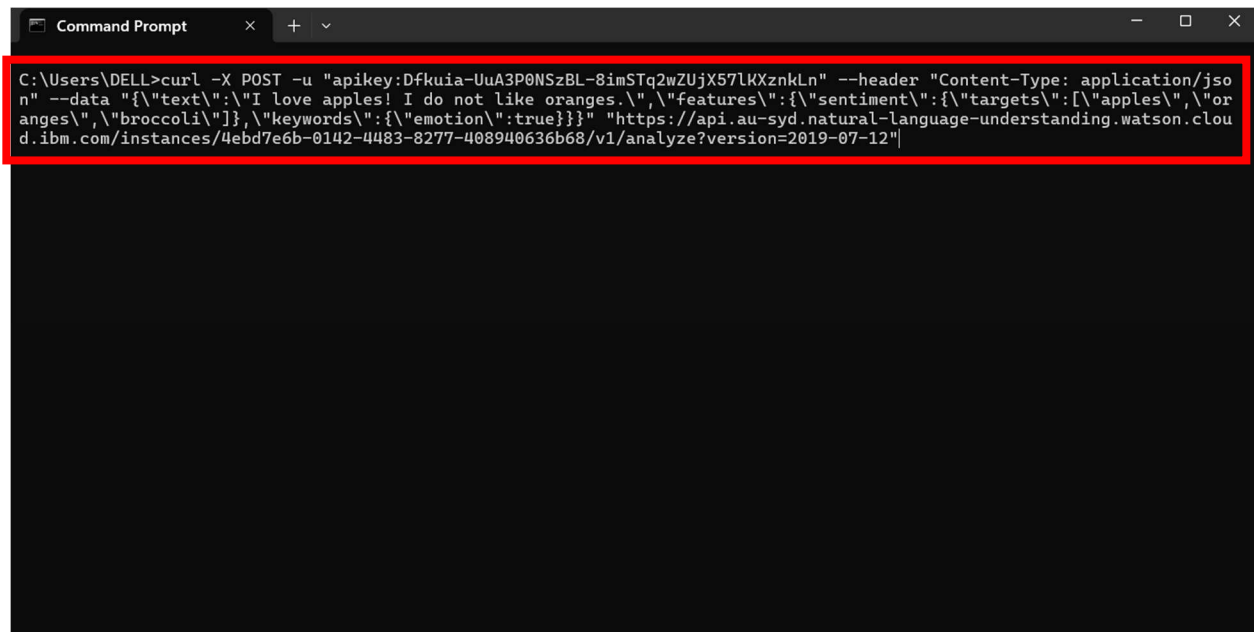
```
C:\Users\DELL>curl -X POST -u "apikey:Q1_Dfkuia-UuA3P0NSzBL-8imSTq2wZUjX57LkXznkLn" --header "Content-Type: application/json" --data '{"url":"https://www.cdc.gov/diabetes/php/data-research/index.html","features":{"sentiment":{"categories":{"concepts":{"entities":{"keywords":{"https://api.au-syd.natural-language-understanding.watson.cloud.ibm.com/instances/4ebd7e6b-0142-4483-8277-408940636b68/v1/analyze?version=2019-07-12"}}
```

{
 "usage": {
 "text_units": 2,
 "text_characters": 19816,
 "features": 5
 },
 "sentiment": {
 "document": {
 "score": -0.621792,
 "mixed": "1",
 "label": "negative"
 }
 },
 "retrieved_url": "https://www.cdc.gov/diabetes/php/data-research/index.html",
 "language": "en",
 "keywords": [
 {
 "text": "incidence of diabetes",
 "relevance": 0.742903,
 "count": 1
 },
 {
 "text": "people of all ages",
 "relevance": 0.656915,
 "count": 2
 }
]
}

Step23 : Now we can analyze target phrases and keywords of individual text. Copy the below command and replace your API Key and URL.

```
curl -X POST -u "apikey:{ apikey}" --header "Content-Type: application/json" --data
{"text\":"I love apples! I do not like
oranges.\","features\":{"sentiment\":{"targets\":["apples\","oranges\","broccoli"]},"ke
ywords\":{"emotion\:true}}}" "{url}/v1/analyze?version=2019-07-12"
```

Step24 : Copy the above command and paste it in command prompt.



```
Command Prompt
C:\Users\DELL>curl -X POST -u "apikey:Dfkuia-UuA3P0NSzBL-8imSTq2wZUjX57lKXznLn" --header "Content-Type: application/json" --data '{"text\":"I love apples! I do not like oranges.\","features\":{"sentiment\":{"targets\":["apples\","oranges\","broccoli"]},"keywords\":{"emotion\:true}}}' "https://api.au-syd.natural-language-understanding.watson.cloud.ibm.com/instances/4ebd7e6b-0142-4483-8277-408940636b68/v1/analyze?version=2019-07-12"
```

Step24 : This is output , we analyzed phrases and keywords. .

```
Command Prompt
{"trace": "715ff33c-0a56-4510-a708-a162656e6bbd", "code": 401, "error": "Unauthorized", "more_info": "https://cloud.ibm.com/docs/watson?topic=watson-authorization-error"}

C:\Users\DELL>curl -X POST -u "apikey:Q1_Dfkuia-UuA3P0NSzBL-8imSTq2wZUjX57lKXznkLn" --header "Content-Type: application/json" --data '{"text": "I love apples! I do not like oranges.", "features": {"sentiment": {"targets": [{"apples", "oranges", "broccoli"}]}, "keywords": {"emotion": true}}}' "https://api.au-syd.natural-language-understanding.watson.cloud.ibm.com/instances/4ebd7e6b-0142-4483-8277-408940636b68/v1/analyze?version=2019-07-12"
{
  "usage": {
    "text_units": 1,
    "text_characters": 37,
    "features": 2
  },
  "sentiment": {
    "targets": [
      {
        "text": "apples",
        "score": 0.975706,
        "label": "positive"
      },
      {
        "text": "oranges",
        "score": 0,
        "label": "neutral"
      }
    ]
  },
  "document": {
    "score": 0.975706,
    "label": "positive"
  }
}
```