*Restapi\_bottle.py*

*#how to create an api using bottle  
#API 1-> IP  
#api1=http://127.0.0.1:8080/ip***import** bottle  
app=bottle.Bottle()  
@app.route(**'/ip'**, method=**'GET'**)  
**def** api\_ip():  
 **import** sqlite3  
 con=sqlite3.connect(**'mydb.sqlite3'**)  
 cur=con.cursor()  
 cur.execute(**'SELECT IP FROM LOGDATA'**)  
 result=cur.fetchall()  
 *#return str(result) #just to see what the output will be* result=[i[0] **for** i **in** result] *#i is one tuple, result will contain the list* D={k:v **for** k,v **in** enumerate(result)} *#will give the dictionary* **return** D  
  
*#API 2: http://127.0.01:8080/emp*@app.route(**'/emp'**,method=**'POST'**)  
**def** empdetails():  
 details=bottle.request.params *#whatever data is sent it will be in params like a dictionary but will return the reference* details=dict(details) *#this will return the dictionary* **return** details  
  
*#API 3*@app.route(**'/json'**)  
**def** fromjson():  
 F=open(**'mydata.json'**,**'w'**)  
 D={**'course'**:**'python'**,**'loc'**:**'blr'**}  
 **import** json  
 json.dump(D,F)  
 F.close()  
 F=open(**'mydata.json'**)  
 r=json.load(F)  
 F.close()  
 **return** r  
  
app.run()

O/P:  
"C:\Python Training\myvenv1\Scripts\python.exe" "C:/Python Training/bin/restapi\_bottle.py"

Bottle v0.12.18 server starting up (using WSGIRefServer())...

Listening on http://127.0.0.1:8080/

Hit Ctrl-C to quit.

127.0.0.1 - - [13/Jan/2020 00:57:27] "GET / HTTP/1.1" 404 720

127.0.0.1 - - [13/Jan/2020 00:57:33] "GET /json HTTP/1.1" 200 34

127.0.0.1 - - [13/Jan/2020 01:00:32] "GET /ip HTTP/1.1" 200 3478

127.0.0.1 - - [13/Jan/2020 01:00:32] "POST /emp?user=abc&passwd=xyz HTTP/1.1" 200 32

127.0.0.1 - - [13/Jan/2020 01:00:32] "GET /json HTTP/1.1" 200 34

127.0.0.1 - - [13/Jan/2020 01:01:43] "GET / HTTP/1.1" 404 720

Call\_api.py

*#how a website(bookmyshow) calls an api*api1=**'http://127.0.0.1:8080/ip'**api2=**'http://127.0.0.1:8080/emp'  
import** requests  
api1\_res=requests.get(api1)  
api1\_res=api1\_res.json()  
print(**'api1\_res='**,api1\_res)  
  
api2\_res=requests.post(api2,params={**'user'**:**'abc'**,**'passwd'**:**'xyz'**})  
api2\_res=api2\_res.json()  
print(**'api2\_res='**,api2\_res)  
  
api3=**'http://127.0.0.1:8080/json'**api3\_res= requests.get(api3)  
api3\_res=api3\_res.json()  
print(**'api3\_res='**,api3\_res)

O/P:  
"C:\Python Training\myvenv1\Scripts\python.exe" "C:/Python Training/bin/call\_api.py"

api1\_res= {'0': '123.123.123.123', '1': '123.123.123.123', '2': '123.123.123.123', '3': '123.123.123.123', '4': '123.123.123.123', '5': '123.123.123.123', '6': '123.123.123.123', '7': '123.123.123.123', '8': '123.123.123.123', '9': '123.123.123.123', '10': '123.123.123.123', '11': '123.123.123.123', '12': '123.123.123.123', '13': '123.123.123.123', '14': '123.123.123.123', '15': '123.123.123.123', '16': '123.123.123.123', '17': '123.123.123.123', '18': '123.123.123.123', '19': '123.123.123.123', '20': '123.123.123.123', '21': '123.123.123.123', '22': '123.123.123.123', '23': '123.123.123.123', '24': '123.123.123.123', '25': '123.123.123.123', '26': '123.123.123.123', '27': '123.123.123.123', '28': '123.123.123.123', '29': '123.123.123.123', '30': '123.123.123.123', '31': '123.123.123.123', '32': '123.123.123.123', '33': '123.123.123.123', '34': '123.123.123.123', '35': '123.123.123.123', '36': '123.123.123.123', '37': '123.123.123.123', '38': '123.123.123.123', '39': '123.123.123.123', '40': '123.123.123.123', '41': '123.123.123.123', '42': '123.123.123.123', '43': '123.123.123.123', '44': '123.123.123.123', '45': '123.123.123.123', '46': '123.123.123.123', '47': '123.123.123.123', '48': '123.123.123.123', '49': '123.123.123.123', '50': '123.123.123.123', '51': '123.123.123.123', '52': '123.123.123.123', '53': '123.123.123.123', '54': '123.123.123.123', '55': '123.123.123.123', '56': '123.123.123.123', '57': '123.123.123.123', '58': '123.123.123.123', '59': '123.123.123.123', '60': '123.123.123.123', '61': '123.123.123.123', '62': '123.123.123.123', '63': '123.123.123.123', '64': '123.123.123.123', '65': '123.123.123.123', '66': '123.123.123.123', '67': '123.123.123.123', '68': '123.123.123.123', '69': '123.123.123.123', '70': '123.123.123.123', '71': '123.123.123.123', '72': '123.123.123.123', '73': '123.123.123.123', '74': '123.123.123.123', '75': '123.123.123.123', '76': '123.123.123.123', '77': '123.123.123.123', '78': '123.123.123.123', '79': '123.123.123.123', '80': '123.123.123.123', '81': '123.123.123.123', '82': '123.123.123.123', '83': '123.123.123.123', '84': '123.123.123.123', '85': '123.123.123.123', '86': '123.123.123.123', '87': '123.123.123.123', '88': '123.123.123.123', '89': '123.123.123.123', '90': '123.123.123.123', '91': '123.123.123.123', '92': '123.123.123.123', '93': '123.123.123.123', '94': '123.123.123.123', '95': '123.123.123.123', '96': '123.123.123.123', '97': '123.123.123.123', '98': '123.123.123.123', '99': '123.123.123.123', '100': '123.123.123.123', '101': '123.123.123.123', '102': '123.123.123.123', '103': '123.123.123.123', '104': '123.123.123.123', '105': '123.123.123.123', '106': '123.123.123.123', '107': '123.123.123.123', '108': '123.123.123.123', '109': '123.123.123.123', '110': '123.123.123.123', '111': '123.123.123.123', '112': '123.123.123.123', '113': '123.123.123.123', '114': '123.123.123.123', '115': '123.123.123.123', '116': '123.123.123.123', '117': '123.123.123.123', '118': '123.123.123.123', '119': '123.123.123.123', '120': '123.123.123.123', '121': '123.123.123.123', '122': '123.123.123.123', '123': '123.123.123.123', '124': '123.123.123.123', '125': '123.123.123.123', '126': '123.123.123.123', '127': '123.123.123.123', '128': '123.123.123.123', '129': '123.123.123.123', '130': '123.123.123.123', '131': '123.123.123.123', '132': '123.123.123.123', '133': '123.123.123.123', '134': '123.123.123.123', '135': '123.123.123.123', '136': '123.123.123.123', '137': '123.123.123.123'}

api2\_res= {'user': 'abc', 'passwd': 'xyz'}

api3\_res= {'course': 'python', 'loc': 'blr'}

Process finished with exit code 0