

Nima Memarzadeh Module 9.2

```
test_connection.py > ...
1  import requests
2
3  # Test connection to Google's website
4  response = requests.get('http://www.google.com')
5  print(response.status_code)
6

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS  COMMENTS  [x] zsh

nimamemarzadeh@Nimas-MacBook-Pro module-9-py % python3 test_connection.py
200
```

```

import requests
from datetime import datetime, timezone

def get_iss_location():
    url = 'http://api.open-notify.org/iss-now.json'
    response = requests.get(url)
    response.raise_for_status()
    data = response.json()

    position = data['iss_position']
    latitude = position['latitude']
    longitude = position['longitude']
    timestamp = datetime.fromtimestamp(data['timestamp'], tz=timezone.utc).strftime('%Y-%m-%d %H:%M:%S')

    print(f"As of {timestamp} UTC, the ISS is at latitude {latitude} and longitude {longitude}.")

def get_astronauts():
    url = 'http://api.open-notify.org/astros.json'
    response = requests.get(url)
    response.raise_for_status()
    data = response.json()

    print("\nAstronauts in space:")
    print("=====")
    print(data)

    print("\nBetter formatted results:")
    print("-----")
    print(f"\nThere are {data['number']} astronauts in space right now:\n")
    for person in data['people']:
        print(f"{person['name']} aboard the {person['craft']}")

def main():
    try:
        get_iss_location()
        get_astronauts()
    except requests.exceptions.RequestException as e:
        print(f"Error occurred: {e}")
    except Exception as e:
        print(f"Unexpected error: {e}")

if __name__ == "__main__":
    main()

```

nimamemarzadeh@Nimas-MacBook-Pro module-9-py % python3 retrieve_astronauts.py
As of 2024-12-04 17:12:26 UTC, the ISS is at latitude -30.6173 and longitude 66.3637.

Astronauts in space:

```

=====
{'people': [{'craft': 'ISS', 'name': 'Oleg Kononenko'}, {'craft': 'ISS', 'name': 'Nikolai Chub'}, {'craft': 'ISS', 'name': 'Tracy Caldwell Dyson'}, {'craft': 'ISS', 'name': 'Matthew Dominick'}, {'craft': 'ISS', 'name': 'Michael Barratt'}, {'craft': 'ISS', 'name': 'Jeanette Epps'}, {'craft': 'ISS', 'name': 'Alexander Grebenkin'}, {'craft': 'ISS', 'name': 'Butch Wilmore'}, {'craft': 'ISS', 'name': 'Sunita Williams'}, {'craft': 'Tiangong', 'name': 'Li Guangsu'}, {'craft': 'Tiangong', 'name': 'Li Cong'}, {'craft': 'Tiangong', 'name': 'Ye Guangfu'}], 'number': 12, 'message': 'success'}

```

Better formatted results:

There are 12 astronauts in space right now:

```

Oleg Kononenko aboard the ISS
Nikolai Chub aboard the ISS
Tracy Caldwell Dyson aboard the ISS
Matthew Dominick aboard the ISS
Michael Barratt aboard the ISS
Jeanette Epps aboard the ISS
Alexander Grebenkin aboard the ISS
Butch Wilmore aboard the ISS
Sunita Williams aboard the ISS
Li Guangsu aboard the Tiangong
Li Cong aboard the Tiangong
Ye Guangfu aboard the Tiangong

```

nimamemarzadeh@Nimas-MacBook-Pro module-9-py %

```
nimamemarzadeh@Nimas-MacBook-Pro module-9-py % python3 starship_details.py
Connection successful!
```

Unformatted Response:

```
{ "name": "Millennium Falcon", "model": "YT-1300 light freighter", "manufacturer": "Corellian Engineering Corporation", "cost_in_credits": "100000", "length": "34.37", "max_atmosphering_speed": "1050", "crew": "4", "passengers": "6", "cargo_capacity": "100000", "consumables": "2 months", "hyperdrive_rating": "0.5", "MGLT": "75", "starship_class": "Light freighter", "pilots": ["https://swapi.dev/api/people/13/", "https://swapi.dev/api/people/14/", "https://swapi.dev/api/people/25/", "https://swapi.dev/api/people/31/"], "films": ["https://swapi.dev/api/films/1/", "https://swapi.dev/api/films/2/", "https://swapi.dev/api/films/3/"], "created": "2014-12-10T16:59:45.094000Z", "edited": "2014-12-20T21:23:49.880000Z", "url": "https://swapi.dev/api/starships/10/" }
```

Formatted Response:

```
{
  "name": "Millennium Falcon",
  "model": "YT-1300 light freighter",
  "manufacturer": "Corellian Engineering Corporation",
  "cost_in_credits": "100000",
  "length": "34.37",
  "max_atmosphering_speed": "1050",
  "crew": "4",
  "passengers": "6",
  "cargo_capacity": "100000",
  "consumables": "2 months",
  "hyperdrive_rating": "0.5",
  "MGLT": "75",
  "starship_class": "Light freighter",
  "pilots": [
    "https://swapi.dev/api/people/13/",
    "https://swapi.dev/api/people/14/",
    "https://swapi.dev/api/people/25/",
    "https://swapi.dev/api/people/31/"
  ],
  "films": [
    "https://swapi.dev/api/films/1/",
    "https://swapi.dev/api/films/2/",
    "https://swapi.dev/api/films/3/"
  ],
  "created": "2014-12-10T16:59:45.094000Z",
  "edited": "2014-12-20T21:23:49.880000Z",
  "url": "https://swapi.dev/api/starships/10/"
}
```

Additional Details: for better readability

Starship Details:

```
Name: Millennium Falcon
Model: YT-1300 light freighter
Manufacturer: Corellian Engineering Corporation
Cost in Credits: 100000
Length: 34.37 meters
Crew: 4
Passengers: 6
```