

```
In [1]: from selenium import webdriver
        from selenium.webdriver.common.by import By
        from selenium.webdriver.support.ui import WebDriverWait
        from selenium.webdriver.support import expected_conditions as EC
        import time
        import pandas as pd
        from selenium.common.exceptions import NoSuchElementException, Stal
        from selenium.webdriver.common.action_chains import ActionChains
```

```
In [2]: driver = webdriver.Chrome()
        wait = WebDriverWait(driver, 30)
```

ANDHRA PRADESH

```
In [3]: driver.get("https://www.redbus.in/online-booking/apsrtc/?utm_source
```

```
In [4]: and_data = []
```

```
In [5]: def select_date(travel_day):
        try:
            # Click on the date picker to open the calendar
            date_input = driver.find_element(By.ID, 'onward_cal')
            date_input.click()

            # Wait until the calendar is visible and select the desired
            WebDriverWait(driver, 10).until(
                EC.element_to_be_clickable((By.XPATH, f"//td[@class='wd
            ).click()
        except Exception as e:
            print(f"An error occurred while selecting the date: {e}")
```

```

In [6]: # Step 1: Use XPath to directly select the route elements (anchor t
def scrape_page():
    route_elements = driver.find_elements(By.XPATH, '//a[@class="ro

    for route_element in route_elements:
        try:
            # Extracting the route name and link
            routename_and = route_element.text
            routelink_and = route_element.get_attribute('href')

            # Append data only if both route name and link are pres
            if routename_and and routelink_and:
                and_data.append({
                    "Route Name": routename_and,
                    "Route Link": routelink_and
                })

            # Print for debugging purposes
            print(f"Route Name: {routename_and}")
            print(f"Route Link: {routelink_and}")
        else:
            print("Missing data for route name or route link")

    except Exception as e:
        # Handle any exceptions that may occur (like element no
        print(f"An error occurred: {e}")
        continue

```

```

In [7]: # Scrape data from the first 5 pages
for page_number in range(1, 6):
    scrape_page()
    if page_number < 5: # Don't try to click next on the last page
        try:
            # Locate the pagination container
            pagination_container = wait.until(EC.presence_of_element
                (By.XPATH, '//*[@id="root"]/div/div[4]/div[12]'))

            # Locate the next page button within the container
            next_page_button = pagination_container.find_element(
                By.XPATH, f'./div[contains(@class, "DC_117_pageTab
            )

            # Ensure the next page button is in view
            actions = ActionChains(driver)
            actions.move_to_element(next_page_button).perform()
            time.sleep(1) # Wait for a bit after scrolling

            # Log the action
            print(f"Clicking on page {page_number + 1}")

            # Click the next page button
            next_page_button.click()

            # Wait for the page number to update to the next page

```

```

wait.until(EC.text_to_be_present_in_element(
    (By.XPATH, '//div[contains(@class, "DC_117_pageTabs

# Log the successful page navigation
print(f"Successfully navigated to page {page_number + 1

# Wait for a short duration to ensure the next page loa
time.sleep(3)
except Exception as e:
    print(f"An error occurred while navigating to page {pag
    break

```

Route Name: Hyderabad to Vijayawada  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-vijayawada> (<https://www.redbus.in/bus-tickets/hyderabad-to-vijayawada>)  
Route Name: Vijayawada to Hyderabad  
Route Link: <https://www.redbus.in/bus-tickets/vijayawada-to-hyderabad> (<https://www.redbus.in/bus-tickets/vijayawada-to-hyderabad>)  
Route Name: Hyderabad to Ongole  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-ongole> (<https://www.redbus.in/bus-tickets/hyderabad-to-ongole>)  
Route Name: Kakinada to Visakhapatnam  
Route Link: <https://www.redbus.in/bus-tickets/kakinada-to-visakhapatnam> (<https://www.redbus.in/bus-tickets/kakinada-to-visakhapatnam>)  
Route Name: Bangalore to Tirupati  
Route Link: <https://www.redbus.in/bus-tickets/bangalore-to-tirupati> (<https://www.redbus.in/bus-tickets/bangalore-to-tirupati>)  
Route Name: Bangalore to Kadapa  
Route Link: <https://www.redbus.in/bus-tickets/bangalore-to-kadapa> (<https://www.redbus.in/bus-tickets/bangalore-to-kadapa>)  
Route Name: Ongole to Hyderabad

```
In [8]: df_and = pd.DataFrame(and_data)

df_and.to_csv("/Users/jainivedhitha/Desktop/scraped_routes_and.csv")

print(df_and.head())
```

	Route Name \	Route Link
0	Hyderabad to Vijayawada	<a href="https://www.redbus.in/bus-tickets/hyderabad-to-vijayawada">https://www.redbus.in/bus-tickets/hyderabad-to...</a> ( <a href="https://www.redbus.in/bus-tickets/hyderabad-to-vijayawada">https://www.redbus.in/bus-tickets/hyderabad-to...</a> )
1	Vijayawada to Hyderabad	<a href="https://www.redbus.in/bus-tickets/vijayawada-to-hyderabad">https://www.redbus.in/bus-tickets/vijayawada-t...</a> ( <a href="https://www.redbus.in/bus-tickets/vijayawada-to-hyderabad">https://www.redbus.in/bus-tickets/vijayawada-t...</a> )
2	Hyderabad to Ongole	<a href="https://www.redbus.in/bus-tickets/hyderabad-to-ongole">https://www.redbus.in/bus-tickets/hyderabad-to...</a> ( <a href="https://www.redbus.in/bus-tickets/hyderabad-to-ongole">https://www.redbus.in/bus-tickets/hyderabad-to...</a> )
3	Kakinada to Visakhapatnam	<a href="https://www.redbus.in/bus-tickets/kakinada-to-visakhapatnam">https://www.redbus.in/bus-tickets/kakinada-to-...</a> ( <a href="https://www.redbus.in/bus-tickets/kakinada-to-visakhapatnam">https://www.redbus.in/bus-tickets/kakinada-to-...</a> )
4	Bangalore to Tirupati	<a href="https://www.redbus.in/bus-tickets/bangalore-to-tirupati">https://www.redbus.in/bus-tickets/bangalore-to...</a> ( <a href="https://www.redbus.in/bus-tickets/bangalore-to-tirupati">https://www.redbus.in/bus-tickets/bangalore-to...</a> )

KERALA

```
In [9]: driver.get("https://www.redbus.in/online-booking/ksrtc-kerala/?utm_
```

```
In [10]: ker_data = []
```

```
In [11]: def select_date(travel_day):
    try:
        # Click on the date picker to open the calendar
        date_input = driver.find_element(By.ID, 'onward_cal')
        date_input.click()

        # Wait until the calendar is visible and select the desired
        WebDriverWait(driver, 10).until(
            EC.element_to_be_clickable((By.XPATH, f"//td[@class='wd
        ]).click()
    except Exception as e:
        print(f"An error occurred while selecting the date: {e}")
```

```

In [12]: # Step 1: Use XPath to directly select the route elements (anchor t
def scrape_page():
    route_elements = driver.find_elements(By.XPATH, '//a[@class="ro
    for route_element in route_elements:
        try:
            routename_ker = route_element.text
            routelink_ker = route_element.get_attribute('href')

            ker_data.append({
                "Route Name": routename_ker,
                "Route Link": routelink_ker
            })

        # Print for debugging purposes
        print(f"Route Name: {routename_ker}")
        print(f"Route Link: {routelink_ker}")

    except Exception as e:
        # Handle any exceptions that may occur (like element not fo
        print(f"An error occurred: {e}")
        continue

```

```

In [13]: # Scrape data from the first 5 pages
for page_number in range(1, 3):
    scrape_page()
    if page_number < 2: # Don't try to click next on the last page
        try:
            # Locate the pagination container
            pagination_container = wait.until(EC.presence_of_element
                (By.XPATH, '//*[@id="root"]/div/div[4]/div[12]'))

            # Locate the next page button within the container
            next_page_button = pagination_container.find_element(
                By.XPATH, f'./div[contains(@class, "DC_117_pageTab
            )

            # Ensure the next page button is in view
            actions = ActionChains(driver)
            actions.move_to_element(next_page_button).perform()
            time.sleep(1) # Wait for a bit after scrolling

            # Log the action
            print(f"Clicking on page {page_number + 1}")

            # Click the next page button
            next_page_button.click()

            # Wait for the page number to update to the next page
            wait.until(EC.text_to_be_present_in_element(
                (By.XPATH, '//div[contains(@class, "DC_117_pageTabs

            # Log the successful page navigation
            print(f"Successfully navigated to page {page_number + 1

```

```
        # Wait for a short duration to ensure the next page loads
        time.sleep(3)
    except Exception as e:
        print(f"An error occurred while navigating to page {page}")
        break
```

Route Name: Bangalore to Kozhikode  
Route Link: <https://www.redbus.in/bus-tickets/bangalore-to-kozhikode> (<https://www.redbus.in/bus-tickets/bangalore-to-kozhikode>)  
Route Name: Kozhikode to Bangalore  
Route Link: <https://www.redbus.in/bus-tickets/kozhikode-to-bangalore> (<https://www.redbus.in/bus-tickets/kozhikode-to-bangalore>)  
Route Name: Kozhikode to Ernakulam  
Route Link: <https://www.redbus.in/bus-tickets/kozhikode-to-ernakulam> (<https://www.redbus.in/bus-tickets/kozhikode-to-ernakulam>)  
Route Name: Ernakulam to Kozhikode  
Route Link: <https://www.redbus.in/bus-tickets/ernakulam-to-kozhikode> (<https://www.redbus.in/bus-tickets/ernakulam-to-kozhikode>)  
Route Name: Bangalore to Kannur  
Route Link: <https://www.redbus.in/bus-tickets/bangalore-to-kannur> (<https://www.redbus.in/bus-tickets/bangalore-to-kannur>)  
Route Name: Kozhikode to Mysore  
Route Link: <https://www.redbus.in/bus-tickets/kozhikode-to-mysore> (<https://www.redbus.in/bus-tickets/kozhikode-to-mysore>)  
Route Name: Kannur to Bangalore  
Route Link: <https://www.redbus.in/bus-tickets/kannur-to-bangalore> (<https://www.redbus.in/bus-tickets/kannur-to-bangalore>)  
Route Name: Kozhikode to Thiruvananthapuram  
Route Link: <https://www.redbus.in/bus-tickets/kozhikode-to-thiruvananthapuram> (<https://www.redbus.in/bus-tickets/kozhikode-to-thiruvananthapuram>)  
Route Name: Mysore to Kozhikode  
Route Link: <https://www.redbus.in/bus-tickets/mysore-to-kozhikode> (<https://www.redbus.in/bus-tickets/mysore-to-kozhikode>)  
Route Name: Bangalore to Kalpetta (kerala)  
Route Link: <https://www.redbus.in/bus-tickets/bangalore-to-kalpetta> (<https://www.redbus.in/bus-tickets/bangalore-to-kalpetta>)  
Clicking on page 2  
Successfully navigated to page 2  
Route Name: Kalpetta (kerala) to Bangalore  
Route Link: <https://www.redbus.in/bus-tickets/kalpetta-to-bangalore> (<https://www.redbus.in/bus-tickets/kalpetta-to-bangalore>)  
Route Name: Thiruvananthapuram to Kozhikode  
Route Link: <https://www.redbus.in/bus-tickets/thiruvananthapuram-to-kozhikode> (<https://www.redbus.in/bus-tickets/thiruvananthapuram-to-kozhikode>)  
Route Name: Kozhikode to Thrissur  
Route Link: <https://www.redbus.in/bus-tickets/kozhikode-to-thrissur> (<https://www.redbus.in/bus-tickets/kozhikode-to-thrissur>)  
Route Name: Kozhikode to Kottayam  
Route Link: <https://www.redbus.in/bus-tickets/kozhikode-to-kottayam> (<https://www.redbus.in/bus-tickets/kozhikode-to-kottayam>)  
Route Name: Kottayam to Kozhikode  
Route Link: <https://www.redbus.in/bus-tickets/kottayam-to-kozhikode> (<https://www.redbus.in/bus-tickets/kottayam-to-kozhikode>)

```
In [14]: df_ker = pd.DataFrame(ker_data)

df_ker.to_csv("/Users/jainivedhitha/Desktop/scraped_routes_ker.csv")

print(df_ker.head())
```

	Route Name	Route Link
0	Bangalore to Kozhikode	<a href="https://www.redbus.in/bus-tickets/bangalore-to...">https://www.redbus.in/bus-tickets/bangalore-to...</a> ( <a href="https://www.redbus.in/bus-tickets/bangalore-to...">https://www.redbus.in/bus-tickets/bangalore-to...</a> )
1	Kozhikode to Bangalore	<a href="https://www.redbus.in/bus-tickets/kozhikode-to...">https://www.redbus.in/bus-tickets/kozhikode-to...</a> ( <a href="https://www.redbus.in/bus-tickets/kozhikode-to...">https://www.redbus.in/bus-tickets/kozhikode-to...</a> )
2	Kozhikode to Ernakulam	<a href="https://www.redbus.in/bus-tickets/kozhikode-to...">https://www.redbus.in/bus-tickets/kozhikode-to...</a> ( <a href="https://www.redbus.in/bus-tickets/kozhikode-to...">https://www.redbus.in/bus-tickets/kozhikode-to...</a> )
3	Ernakulam to Kozhikode	<a href="https://www.redbus.in/bus-tickets/ernakulam-to...">https://www.redbus.in/bus-tickets/ernakulam-to...</a> ( <a href="https://www.redbus.in/bus-tickets/ernakulam-to...">https://www.redbus.in/bus-tickets/ernakulam-to...</a> )
4	Bangalore to Kannur	<a href="https://www.redbus.in/bus-tickets/bangalore-to...">https://www.redbus.in/bus-tickets/bangalore-to...</a> ( <a href="https://www.redbus.in/bus-tickets/bangalore-to...">https://www.redbus.in/bus-tickets/bangalore-to...</a> )

TELENGANA

```
In [15]: driver.get("https://www.redbus.in/online-booking/tsrtc/?utm_source=
```

```
In [16]: tel_data = []
```

```
In [17]: def select_date(travel_day):
    try:
        # Click on the date picker to open the calendar
        date_input = driver.find_element(By.ID, 'onward_cal')
        date_input.click()

        # Wait until the calendar is visible and select the desired
        WebDriverWait(driver, 10).until(
            EC.element_to_be_clickable((By.XPATH, f"//td[@class='wd
        ).click()
    except Exception as e:
        print(f"An error occurred while selecting the date: {e}")
```

```

In [18]: # Step 1: Use XPath to directly select the route elements (anchor t
def scrape_page():
    route_elements = driver.find_elements(By.XPATH, '//a[@class="ro
    for route_element in route_elements:
        try:
            routename_tel = route_element.text
            routelink_tel = route_element.get_attribute('href')

            tel_data.append({
                "Route Name": routename_tel,
                "Route Link": routelink_tel
            })

        # Print for debugging purposes
        print(f"Route Name: {routename_tel}")
        print(f"Route Link: {routelink_tel}")

    except Exception as e:
        # Handle any exceptions that may occur (like element not fo
        print(f"An error occurred: {e}")
        continue

```

```

In [19]: # Scrape data from the first 5 pages
for page_number in range(1, 4):
    scrape_page()
    if page_number < 3: # Don't try to click next on the last page
        try:
            # Locate the pagination container
            pagination_container = wait.until(EC.presence_of_element
                (By.XPATH, '//*[@id="root"]/div/div[4]/div[12]'))

            # Locate the next page button within the container
            next_page_button = pagination_container.find_element(
                By.XPATH, f'./div[contains(@class, "DC_117_pageTab
            )

            # Ensure the next page button is in view
            actions = ActionChains(driver)
            actions.move_to_element(next_page_button).perform()
            time.sleep(1) # Wait for a bit after scrolling

            # Log the action
            print(f"Clicking on page {page_number + 1}")

            # Click the next page button
            next_page_button.click()

            # Wait for the page number to update to the next page
            wait.until(EC.text_to_be_present_in_element(
                (By.XPATH, '//div[contains(@class, "DC_117_pageTabs

            # Log the successful page navigation
            print(f"Successfully navigated to page {page_number + 1

```



```
        # Wait for a short duration to ensure the next page loads
        time.sleep(3)
    except Exception as e:
        print(f"An error occurred while navigating to page {page}")
        break
```

Route Name: Hyderabad to Vijayawada  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-vijayawada> (<https://www.redbus.in/bus-tickets/hyderabad-to-vijayawada>)  
Route Name: Khammam to Hyderabad  
Route Link: <https://www.redbus.in/bus-tickets/khammam-to-hyderabad> (<https://www.redbus.in/bus-tickets/khammam-to-hyderabad>)  
Route Name: Hyderabad to Khammam  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-khammam> (<https://www.redbus.in/bus-tickets/hyderabad-to-khammam>)  
Route Name: Hyderabad to Srisailem  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-srisailem> (<https://www.redbus.in/bus-tickets/hyderabad-to-srisailem>)  
Route Name: Karimnagar to Hyderabad  
Route Link: <https://www.redbus.in/bus-tickets/karimnagar-to-hyderabad> (<https://www.redbus.in/bus-tickets/karimnagar-to-hyderabad>)  
Route Name: Hyderabad to Karimnagar  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-karimnagar> (<https://www.redbus.in/bus-tickets/hyderabad-to-karimnagar>)  
Route Name: Hyderabad to Mancherla  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-mancherla> (<https://www.redbus.in/bus-tickets/hyderabad-to-mancherla>)  
Route Name: Hyderabad to Nirmal  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-nirmal> (<https://www.redbus.in/bus-tickets/hyderabad-to-nirmal>)  
Route Name: Hyderabad to Adilabad  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-adilabad> (<https://www.redbus.in/bus-tickets/hyderabad-to-adilabad>)  
Route Name: Hyderabad to Ongole  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-ongole> (<https://www.redbus.in/bus-tickets/hyderabad-to-ongole>)  
Clicking on page 2  
Successfully navigated to page 2  
Route Name: Kothagudem to Hyderabad  
Route Link: <https://www.redbus.in/bus-tickets/kothagudem-to-hyderabad> (<https://www.redbus.in/bus-tickets/kothagudem-to-hyderabad>)  
Route Name: Guntur (Andhra Pradesh) to Hyderabad  
Route Link: <https://www.redbus.in/bus-tickets/guntur-to-hyderabad> (<https://www.redbus.in/bus-tickets/guntur-to-hyderabad>)  
Route Name: Hyderabad to Guntur (Andhra Pradesh)  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-guntur> (<https://www.redbus.in/bus-tickets/hyderabad-to-guntur>)  
Route Name: Godavarikhani to Hyderabad  
Route Link: <https://www.redbus.in/bus-tickets/godavarikhani-to-hyderabad> (<https://www.redbus.in/bus-tickets/godavarikhani-to-hyderabad>)  
Route Name: Hyderabad to Kothagudem  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-kothagudem> (<https://www.redbus.in/bus-tickets/hyderabad-to-kothagudem>)  
Route Name: Hyderabad to Sathupally

Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-sathupalli> (<https://www.redbus.in/bus-tickets/hyderabad-to-sathupalli>)  
Route Name: Hyderabad to Warangal  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-warangal> (<https://www.redbus.in/bus-tickets/hyderabad-to-warangal>)  
Route Name: Kodad to Hyderabad  
Route Link: <https://www.redbus.in/bus-tickets/kodad-to-hyderabad> (<https://www.redbus.in/bus-tickets/kodad-to-hyderabad>)  
Route Name: Jagityal to Hyderabad  
Route Link: <https://www.redbus.in/bus-tickets/jagityal-to-hyderabad> (<https://www.redbus.in/bus-tickets/jagityal-to-hyderabad>)  
Route Name: Hyderabad to Bhadrachalam  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-bhadrachalam> (<https://www.redbus.in/bus-tickets/hyderabad-to-bhadrachalam>)  
Clicking on page 3  
Successfully navigated to page 3  
Route Name: Hyderabad to Tirupati  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-tirupathi> (<https://www.redbus.in/bus-tickets/hyderabad-to-tirupathi>)  
Route Name: Hyderabad to Godavarikhani  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-godavarikhani> (<https://www.redbus.in/bus-tickets/hyderabad-to-godavarikhani>)  
Route Name: Hyderabad to Armoor  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-armoor> (<https://www.redbus.in/bus-tickets/hyderabad-to-armoor>)  
Route Name: Hyderabad to Nandyal  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-nandyal> (<https://www.redbus.in/bus-tickets/hyderabad-to-nandyal>)  
Route Name: Hyderabad to Kodad  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-kodad> (<https://www.redbus.in/bus-tickets/hyderabad-to-kodad>)  
Route Name: Hyderabad to Addanki  
Route Link: <https://www.redbus.in/bus-tickets/hyderabad-to-addanki> (<https://www.redbus.in/bus-tickets/hyderabad-to-addanki>)

```
In [20]: df_ker = pd.DataFrame(ker_data)

df_ker.to_csv("/Users/jainivedhitha/Desktop/scraped_routes_ker.csv")

print(df_ker.head())
```

	Route Name	Route Link
0	Bangalore to Kozhikode	<a href="https://www.redbus.in/bus-tickets/bangalore-to...">https://www.redbus.in/bus-tickets/bangalore-to...</a> ( <a href="https://www.redbus.in/bus-tickets/bangalore-to...">https://www.redbus.in/bus-tickets/bangalore-to...</a> )
1	Kozhikode to Bangalore	<a href="https://www.redbus.in/bus-tickets/kozhikode-to...">https://www.redbus.in/bus-tickets/kozhikode-to...</a> ( <a href="https://www.redbus.in/bus-tickets/kozhikode-to...">https://www.redbus.in/bus-tickets/kozhikode-to...</a> )
2	Kozhikode to Ernakulam	<a href="https://www.redbus.in/bus-tickets/kozhikode-to...">https://www.redbus.in/bus-tickets/kozhikode-to...</a> ( <a href="https://www.redbus.in/bus-tickets/kozhikode-to...">https://www.redbus.in/bus-tickets/kozhikode-to...</a> )
3	Ernakulam to Kozhikode	<a href="https://www.redbus.in/bus-tickets/ernakulam-to...">https://www.redbus.in/bus-tickets/ernakulam-to...</a> ( <a href="https://www.redbus.in/bus-tickets/ernakulam-to...">https://www.redbus.in/bus-tickets/ernakulam-to...</a> )
4	Bangalore to Kannur	<a href="https://www.redbus.in/bus-tickets/bangalore-to...">https://www.redbus.in/bus-tickets/bangalore-to...</a> ( <a href="https://www.redbus.in/bus-tickets/bangalore-to...">https://www.redbus.in/bus-tickets/bangalore-to...</a> )

```

In [21]: driver.get("https://www.redbus.in/online-booking/ktcl/?utm_source=r

In [22]: kad_data = []

In [23]: def select_date(travel_day):
    try:
        # Click on the date picker to open the calendar
        date_input = driver.find_element(By.ID, 'onward_cal')
        date_input.click()

        # Wait until the calendar is visible and select the desired
        WebDriverWait(driver, 10).until(
            EC.element_to_be_clickable((By.XPATH, f"//td[@class='wd
        ).click()
    except Exception as e:
        print(f"An error occurred while selecting the date: {e}")

In [24]: # Step 1: Use XPath to directly select the route elements (anchor t
def scrape_page():
    route_elements = driver.find_elements(By.XPATH, '//a[@class="ro
    for route_element in route_elements:
        try:
            routename = route_element.text
            routelink = route_element.get_attribute('href')

            kad_data.append({
                "Route Name": routename,
                "Route Link": routelink
            })

            # Print for debugging purposes
            print(f"Route Name: {routename}")
            print(f"Route Link: {routelink}")

        except Exception as e:
            # Handle any exceptions that may occur (like element not fo
            print(f"An error occurred: {e}")
            continue

In [25]: # Scrape data from the first 5 pages
for page_number in range(1, 5):
    scrape_page()
    if page_number < 4: # Don't try to click next on the last page
        try:
            # Locate the pagination container
            pagination_container = wait.until(EC.presence_of_element
                (By.XPATH, '//*[@id="root"]/div/div[4]/div[12]'))

            # Locate the next page button within the container
            next_page_button = pagination_container.find_element(

```

```

        By.XPATH, f'./div[contains(@class, "DC_117_pageTab
    )

    # Ensure the next page button is in view
    actions = ActionChains(driver)
    actions.move_to_element(next_page_button).perform()
    time.sleep(1) # Wait for a bit after scrolling

    # Log the action
    print(f"Clicking on page {page_number + 1}")

    # Click the next page button
    next_page_button.click()

    # Wait for the page number to update to the next page
    wait.until(EC.text_to_be_present_in_element(
        (By.XPATH, '//div[contains(@class, "DC_117_pageTabs

    # Log the successful page navigation
    print(f"Successfully navigated to page {page_number + 1

    # Wait for a short duration to ensure the next page loa
    time.sleep(3)
except Exception as e:
    print(f"An error occurred while navigating to page {pag
    break

```

Route Name: Pune to Goa

Route Link: <https://www.redbus.in/bus-tickets/pune-to-go> (<http://www.redbus.in/bus-tickets/pune-to-go>)

Route Name: Goa to Pune

Route Link: <https://www.redbus.in/bus-tickets/goa-to-pune> (<http://www.redbus.in/bus-tickets/goa-to-pune>)

Route Name: Mumbai to Goa

Route Link: <https://www.redbus.in/bus-tickets/mumbai-to-go> (<http://www.redbus.in/bus-tickets/mumbai-to-go>)

Route Name: Bangalore to Goa

Route Link: <https://www.redbus.in/bus-tickets/bangalore-to-go> (<https://www.redbus.in/bus-tickets/bangalore-to-go>)

Route Name: Goa to Bangalore

Route Link: <https://www.redbus.in/bus-tickets/goa-to-bangalore> (<https://www.redbus.in/bus-tickets/goa-to-bangalore>)

Route Name: Goa to Mumbai

Route Link: <https://www.redbus.in/bus-tickets/goa-to-mumbai> (<http://www.redbus.in/bus-tickets/goa-to-mumbai>)

Route Name: Pandharpur to Goa

Route Link: <https://www.redbus.in/bus-tickets/pandharpur-to-go> (<https://www.redbus.in/bus-tickets/pandharpur-to-go>)

Route Name: Goa to Pandharpur

Route Link: <https://www.redbus.in/bus-tickets/goa-to-pandharpur> (<https://www.redbus.in/bus-tickets/goa-to-pandharpur>)

Route Name: Solapur to Goa

Route Link: <https://www.redbus.in/bus-tickets/solapur-to-go> (<http://www.redbus.in/bus-tickets/solapur-to-go>)

Route Name: Calangute (goa) to Goa Airport

Route Link: <https://www.redbus.in/bus-tickets/calangute-go-to-go-a-airport> (<https://www.redbus.in/bus-tickets/calangute-go-to-go-a-airport>)

Clicking on page 2

Successfully navigated to page 2

Route Name: Goa to Kolhapur(Maharashtra)

Route Link: <https://www.redbus.in/bus-tickets/goa-to-kolhapur-maharashtra> (<https://www.redbus.in/bus-tickets/goa-to-kolhapur-maharashtra>)

Route Name: Goa to Solapur

Route Link: <https://www.redbus.in/bus-tickets/goa-to-solapur> (<https://www.redbus.in/bus-tickets/goa-to-solapur>)

Route Name: Goa to Sangli

Route Link: <https://www.redbus.in/bus-tickets/goa-to-sangli> (<https://www.redbus.in/bus-tickets/goa-to-sangli>)

Route Name: Goa Airport to Calangute (goa)

Route Link: <https://www.redbus.in/bus-tickets/goa-airport-to-calangute-go> (<https://www.redbus.in/bus-tickets/goa-airport-to-calangute-go>)

Route Name: Goa to Sangola (Solapur)

Route Link: <https://www.redbus.in/bus-tickets/goa-to-sangola> (<https://www.redbus.in/bus-tickets/goa-to-sangola>)

Route Name: Sangola (Solapur) to Goa

Route Link: <https://www.redbus.in/bus-tickets/sangola-to-go> (<https://www.redbus.in/bus-tickets/sangola-to-go>)

Route Name: Mopa Airport to Calangute (goa)

Route Link: <https://www.redbus.in/bus-tickets/mopa-airport-to-calangute-go> (<https://www.redbus.in/bus-tickets/mopa-airport-to-calangute-go>)

Route Name: Calangute (goa) to Mopa Airport

Route Link: <https://www.redbus.in/bus-tickets/calangute-go-to-mopa-airport> (<https://www.redbus.in/bus-tickets/calangute-go-to-mopa-airport>)

Route Name: Goa to Mopa Airport

Route Link: <https://www.redbus.in/bus-tickets/goa-to-mopa-airport> (<https://www.redbus.in/bus-tickets/goa-to-mopa-airport>)

Route Name: Goa to Miraj

Route Link: <https://www.redbus.in/bus-tickets/goa-to-miraj> (<https://www.redbus.in/bus-tickets/goa-to-miraj>)

Clicking on page 3

Successfully navigated to page 3

Route Name: Panaji to Goa Airport

Route Link: <https://www.redbus.in/bus-tickets/panaji-to-go-airport> (<https://www.redbus.in/bus-tickets/panaji-to-go-airport>)

Route Name: Mopa Airport to Goa

Route Link: <https://www.redbus.in/bus-tickets/mopa-airport-to-go> (<https://www.redbus.in/bus-tickets/mopa-airport-to-go>)

Route Name: Shivamogga to Goa

Route Link: <https://www.redbus.in/bus-tickets/shimoga-to-go> (<https://www.redbus.in/bus-tickets/shimoga-to-go>)

Route Name: Margao to Mopa Airport

Route Link: <https://www.redbus.in/bus-tickets/margoa-to-mopa-airport> (<https://www.redbus.in/bus-tickets/margoa-to-mopa-airport>)

Route Name: Goa Airport to Goa

Route Link: <https://www.redbus.in/bus-tickets/goa-airport-to-go> (<https://www.redbus.in/bus-tickets/goa-airport-to-go>)

Route Name: Goa to Satara

Route Link: <https://www.redbus.in/bus-tickets/goa-to-satara> (<https://www.redbus.in/bus-tickets/goa-to-satara>)

Route Name: Goa to Goa Airport

Route Link: <https://www.redbus.in/bus-tickets/goa-to-go-a-airport> (<https://www.redbus.in/bus-tickets/goa-to-go-a-airport>)

Route Name: Goa Airport to Panaji

Route Link: <https://www.redbus.in/bus-tickets/goa-airport-to-panaji> (<https://www.redbus.in/bus-tickets/goa-airport-to-panaji>)

Route Name: Goa to Shirdi

Route Link: <https://www.redbus.in/bus-tickets/goa-to-shirdi> (<https://www.redbus.in/bus-tickets/goa-to-shirdi>)

Route Name: Calangute (goa) to Panaji

Route Link: <https://www.redbus.in/bus-tickets/calangute-go-a-to-panaji> (<https://www.redbus.in/bus-tickets/calangute-go-a-to-panaji>)

Clicking on page 4

Successfully navigated to page 4

Route Name: Mopa Airport to Margao

Route Link: <https://www.redbus.in/bus-tickets/mopa-airport-to-margoa> (<https://www.redbus.in/bus-tickets/mopa-airport-to-margoa>)

Route Name: Goa to Shivamogga

Route Link: <https://www.redbus.in/bus-tickets/goa-to-shimoga> (<https://www.redbus.in/bus-tickets/goa-to-shimoga>)

Route Name: Calangute (goa) to Goa

Route Link: <https://www.redbus.in/bus-tickets/calangute-go-a-to-go-a> (<https://www.redbus.in/bus-tickets/calangute-go-a-to-go-a>)

Route Name: Belagavi to Goa

Route Link: <https://www.redbus.in/bus-tickets/belagavi-to-go-a> (<https://www.redbus.in/bus-tickets/belagavi-to-go-a>)

```
In [26]: df_kad = pd.DataFrame(kad_data)

df_kad.to_csv("/Users/jainivedhitha/Desktop/scraped_routes_kad.csv")

print(df_kad.head())
```

	Route Name	Route Link
0	Pune to Goa	<a href="https://www.redbus.in/bus-tickets/pune-to-go-a">https://www.redbus.in/bus-tickets/pune-to-go-a</a> ( <a href="https://www.redbus.in/bus-tickets/pune-to-go-a">https://www.redbus.in/bus-tickets/pune-to-go-a</a> )
1	Goa to Pune	<a href="https://www.redbus.in/bus-tickets/goa-to-pune">https://www.redbus.in/bus-tickets/goa-to-pune</a> ( <a href="https://www.redbus.in/bus-tickets/goa-to-pune">https://www.redbus.in/bus-tickets/goa-to-pune</a> )
2	Mumbai to Goa	<a href="https://www.redbus.in/bus-tickets/mumbai-to-go-a">https://www.redbus.in/bus-tickets/mumbai-to-go-a</a> ( <a href="https://www.redbus.in/bus-tickets/mumbai-to-go-a">https://www.redbus.in/bus-tickets/mumbai-to-go-a</a> )
3	Bangalore to Goa	<a href="https://www.redbus.in/bus-tickets/bangalore-to-go-a">https://www.redbus.in/bus-tickets/bangalore-to-go-a</a> ( <a href="https://www.redbus.in/bus-tickets/bangalore-to-go-a">https://www.redbus.in/bus-tickets/bangalore-to-go-a</a> )
4	Goa to Bangalore	<a href="https://www.redbus.in/bus-tickets/goa-to-bangalore">https://www.redbus.in/bus-tickets/goa-to-bangalore</a> ( <a href="https://www.redbus.in/bus-tickets/goa-to-bangalore">https://www.redbus.in/bus-tickets/goa-to-bangalore</a> )

#RAJASTHAN

```
In [27]: driver.get("https://www.redbus.in/online-booking/rsrtc/?utm_source=
```

```
In [28]: raj_data = []
```

```
In [29]: def select_date(travel_day):
    try:
        # Click on the date picker to open the calendar
        date_input = driver.find_element(By.ID, 'onward_cal')
        date_input.click()

        # Wait until the calendar is visible and select the desired
        WebDriverWait(driver, 10).until(
            EC.element_to_be_clickable((By.XPATH, f'//td[@class="wd
        )).click()
    except Exception as e:
        print(f"An error occurred while selecting the date: {e}")
```

```
In [30]: # Step 1: Use XPath to directly select the route elements (anchor t
def scrape_page():
    route_elements = driver.find_elements(By.XPATH, '//a[@class="ro
    for route_element in route_elements:
        try:
            routename_raj = route_element.text
            routelink_raj = route_element.get_attribute('href')

            raj_data.append({
                "Route Name": routename_raj,
                "Route Link": routelink_raj
            })

            # Print for debugging purposes
            print(f"Route Name: {routename_raj}")
            print(f"Route Link: {routelink_raj}")

        except Exception as e:
            # Handle any exceptions that may occur (like element not fo
            print(f"An error occurred: {e}")
            continue
```

```
In [31]: # Scrape data from the first 5 pages
for page_number in range(1, 3):
    scrape_page()
    if page_number < 2: # Don't try to click next on the last page
        try:
            # Locate the pagination container
            pagination_container = wait.until(EC.presence_of_element_
                (By.XPATH, '//*[@id="root"]/div/div[4]/div[12]'))

            # Locate the next page button within the container
            next_page_button = pagination_container.find_element(
                By.XPATH, f'./div[contains(@class, "DC_117_pageTab
            )

            # Ensure the next page button is in view
            actions = ActionChains(driver)
            actions.move_to_element(next_page_button).perform()
            time.sleep(1) # Wait for a bit after scrolling
```



```

# Log the action
print(f"Clicking on page {page_number + 1}")

# Click the next page button
next_page_button.click()

# Wait for the page number to update to the next page
wait.until(EC.text_to_be_present_in_element(
    (By.XPATH, '//div[contains(@class, "DC_117_pageTabs

# Log the successful page navigation
print(f"Successfully navigated to page {page_number + 1

# Wait for a short duration to ensure the next page loa
time.sleep(3)
except Exception as e:
    print(f"An error occurred while navigating to page {pag
    break

```

Route Name: Udaipur to Jodhpur  
 Route Link: <https://www.redbus.in/bus-tickets/udaipur-to-jodhpur> (<https://www.redbus.in/bus-tickets/udaipur-to-jodhpur>)  
 Route Name: Jodhpur to Ajmer  
 Route Link: <https://www.redbus.in/bus-tickets/jodhpur-to-ajmer> (<https://www.redbus.in/bus-tickets/jodhpur-to-ajmer>)  
 Route Name: Beawar (Rajasthan) to Jaipur (Rajasthan)  
 Route Link: <https://www.redbus.in/bus-tickets/beawer-to-jaipur> (<https://www.redbus.in/bus-tickets/beawer-to-jaipur>)  
 Route Name: Sikar to Jaipur (Rajasthan)  
 Route Link: <https://www.redbus.in/bus-tickets/sikar-to-jaipur> (<https://www.redbus.in/bus-tickets/sikar-to-jaipur>)  
 Route Name: Jaipur (Rajasthan) to Jodhpur  
 Route Link: <https://www.redbus.in/bus-tickets/jaipur-to-jodhpur> (<https://www.redbus.in/bus-tickets/jaipur-to-jodhpur>)  
 Route Name: Aligarh (uttar pradesh) to Jaipur (Rajasthan)  
 Route Link: <https://www.redbus.in/bus-tickets/aligarh-uttar-pradesh-to-jaipur> (<https://www.redbus.in/bus-tickets/aligarh-uttar-pradesh-to-jaipur>)  
 Route Name: Jaipur (Rajasthan) to Aligarh (uttar pradesh)  
 Route Link: <https://www.redbus.in/bus-tickets/jaipur-to-aligarh-uttar-pradesh> (<https://www.redbus.in/bus-tickets/jaipur-to-aligarh-uttar-pradesh>)  
 Route Name: Jodhpur to Beawar (Rajasthan)  
 Route Link: <https://www.redbus.in/bus-tickets/jodhpur-to-beawer> (<https://www.redbus.in/bus-tickets/jodhpur-to-beawer>)  
 Route Name: Jaipur (Rajasthan) to Pilani  
 Route Link: <https://www.redbus.in/bus-tickets/jaipur-to-pilani> (<https://www.redbus.in/bus-tickets/jaipur-to-pilani>)  
 Route Name: Kishangarh to Jaipur (Rajasthan)  
 Route Link: <https://www.redbus.in/bus-tickets/kishangarh-to-jaipur> (<https://www.redbus.in/bus-tickets/kishangarh-to-jaipur>)  
 Clicking on page 2  
 Successfully navigated to page 2  
 Route Name: Pali (Rajasthan) to Udaipur



Route Link: <https://www.redbus.in/bus-tickets/pali-to-udaipur> (<https://www.redbus.in/bus-tickets/pali-to-udaipur>)

Route Name: Udaipur to Pali (Rajasthan)

Route Link: <https://www.redbus.in/bus-tickets/udaipur-to-pali-rajasthan> (<https://www.redbus.in/bus-tickets/udaipur-to-pali-rajasthan>)

Route Name: Kota(Rajasthan) to Udaipur

Route Link: <https://www.redbus.in/bus-tickets/kota-rajasthan-to-udaipur> (<https://www.redbus.in/bus-tickets/kota-rajasthan-to-udaipur>)

Route Name: Jaipur (Rajasthan) to Bhilwara

Route Link: <https://www.redbus.in/bus-tickets/jaipur-to-bhilwara> (<https://www.redbus.in/bus-tickets/jaipur-to-bhilwara>)

Route Name: Sikar to Bikaner

Route Link: <https://www.redbus.in/bus-tickets/sikar-to-bikaner> (<https://www.redbus.in/bus-tickets/sikar-to-bikaner>)

Route Name: Jaipur (Rajasthan) to Bharatpur

Route Link: <https://www.redbus.in/bus-tickets/jaipur-to-bharatpur> (<https://www.redbus.in/bus-tickets/jaipur-to-bharatpur>)

Route Name: Jaipur (Rajasthan) to Mathura

Route Link: <https://www.redbus.in/bus-tickets/jaipur-to-mathura> (<https://www.redbus.in/bus-tickets/jaipur-to-mathura>)

Route Name: Jaipur (Rajasthan) to Kota(Rajasthan)

Route Link: <https://www.redbus.in/bus-tickets/jaipur-to-kota-rajasthan> (<https://www.redbus.in/bus-tickets/jaipur-to-kota-rajasthan>)

```
In [32]: df_raj = pd.DataFrame(raj_data)

df_raj.to_csv("/Users/jainivedhitha/Desktop/scraped_routes_raj.csv")

print(df_raj.head())
```

	Route Name \	Route Link
0	Udaipur to Jodhpur	<a href="https://www.redbus.in/bus-tickets/udaipur-to-jodhpur">https://www.redbus.in/bus-tickets/udaipur-to-jodhpur</a> ( <a href="https://www.redbus.in/bus-tickets/udaipur-to-jodhpur">https://www.redbus.in/bus-tickets/udaipur-to-jodhpur</a> )
1	Jodhpur to Ajmer	<a href="https://www.redbus.in/bus-tickets/jodhpur-to-ajmer">https://www.redbus.in/bus-tickets/jodhpur-to-ajmer</a> ( <a href="https://www.redbus.in/bus-tickets/jodhpur-to-ajmer">https://www.redbus.in/bus-tickets/jodhpur-to-ajmer</a> )
2	Beawar (Rajasthan) to Jaipur (Rajasthan)	<a href="https://www.redbus.in/bus-tickets/beawar-to-jaipur">https://www.redbus.in/bus-tickets/beawar-to-jaipur</a> ( <a href="https://www.redbus.in/bus-tickets/beawar-to-jaipur">https://www.redbus.in/bus-tickets/beawar-to-jaipur</a> )
3	Sikar to Jaipur (Rajasthan)	<a href="https://www.redbus.in/bus-tickets/sikar-to-jaipur">https://www.redbus.in/bus-tickets/sikar-to-jaipur</a> ( <a href="https://www.redbus.in/bus-tickets/sikar-to-jaipur">https://www.redbus.in/bus-tickets/sikar-to-jaipur</a> )
4	Jaipur (Rajasthan) to Jodhpur	<a href="https://www.redbus.in/bus-tickets/jaipur-to-jodhpur">https://www.redbus.in/bus-tickets/jaipur-to-jodhpur</a> ( <a href="https://www.redbus.in/bus-tickets/jaipur-to-jodhpur">https://www.redbus.in/bus-tickets/jaipur-to-jodhpur</a> )

SOUTH BENGAL

```
In [33]: driver.get("https://www.redbus.in/online-booking/south-bengal-state")
```

```
In [34]: sb_data = []
```

```
In [35]: def select_date(travel_day):
    try:
        # Click on the date picker to open the calendar
        date_input = driver.find_element(By.ID, 'onward_cal')
        date_input.click()

        # Wait until the calendar is visible and select the desired
        WebDriverWait(driver, 10).until(
            EC.element_to_be_clickable((By.XPATH, f"//td[@class='wd
        )).click()
    except Exception as e:
        print(f"An error occurred while selecting the date: {e}")
```

```
In [36]: # Step 1: Use XPath to directly select the route elements (anchor t
def scrape_page():
    route_elements = driver.find_elements(By.XPATH, '//a[@class="ro
    for route_element in route_elements:
        try:
            routename_sb = route_element.text
            routelink_sb = route_element.get_attribute('href')

            sb_data.append({
                "Route Name": routename_sb,
                "Route Link": routelink_sb
            })

            # Print for debugging purposes
            print(f"Route Name: {routename_sb}")
            print(f"Route Link: {routelink_sb}")

        except Exception as e:
            # Handle any exceptions that may occur (like element not fo
            print(f"An error occurred: {e}")
            continue
```

```
In [37]: # Scrape data from the first 5 pages
for page_number in range(1, 6):
    scrape_page()
    if page_number < 5: # Don't try to click next on the last page
        try:
            # Locate the pagination container
            pagination_container = wait.until(EC.presence_of_element_
                (By.XPATH, '//*[@id="root"]/div/div[4]/div[12]'))

            # Locate the next page button within the container
            next_page_button = pagination_container.find_element(
                By.XPATH, f'./div[contains(@class, "DC_117_pageTab
            )

            # Ensure the next page button is in view
            actions = ActionChains(driver)
```

```

actions.move_to_element(next_page_button).perform()
time.sleep(1) # Wait for a bit after scrolling

# Log the action
print(f"Clicking on page {page_number + 1}")

# Click the next page button
next_page_button.click()

# Wait for the page number to update to the next page
wait.until(EC.text_to_be_present_in_element(
    (By.XPATH, '//div[contains(@class, "DC_117_pageTabs

# Log the successful page navigation
print(f"Successfully navigated to page {page_number + 1

# Wait for a short duration to ensure the next page loa
time.sleep(3)
except Exception as e:
    print(f"An error occurred while navigating to page {pag
    break

```

Route Name: Durgapur to Calcutta

Route Link: <https://www.redbus.in/bus-tickets/durgapur-to-kolkata>  
(<https://www.redbus.in/bus-tickets/durgapur-to-kolkata>)

Route Name: Kolkata to Burdwan

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-burdwan> (<https://www.redbus.in/bus-tickets/kolkata-to-burdwan>)

Route Name: Haldia to Calcutta

Route Link: <https://www.redbus.in/bus-tickets/haldia-to-kolkata> (<https://www.redbus.in/bus-tickets/haldia-to-kolkata>)

Route Name: Kolkata to Haldia

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-haldia> (<https://www.redbus.in/bus-tickets/kolkata-to-haldia>)

Route Name: Kolkata to Durgapur (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-durgapur>  
(<https://www.redbus.in/bus-tickets/kolkata-to-durgapur>)

Route Name: Kolkata to Arambagh (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-arambagh-west-bengal> (<https://www.redbus.in/bus-tickets/kolkata-to-arambagh-west-bengal>)

Route Name: Midnapore to Kolkata

Route Link: <https://www.redbus.in/bus-tickets/midnapore-to-kolkata>  
(<https://www.redbus.in/bus-tickets/midnapore-to-kolkata>)

Route Name: Kolkata to Digha

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-digha> (<https://www.redbus.in/bus-tickets/kolkata-to-digha>)

Route Name: Digha to Calcutta

Route Link: <https://www.redbus.in/bus-tickets/digha-to-kolkata> (<https://www.redbus.in/bus-tickets/digha-to-kolkata>)

Route Name: Kolkata to Bankura

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-bankura> (<https://www.redbus.in/bus-tickets/kolkata-to-bankura>)

Clicking on page 2

Successfully navigated to page 2

Route Name: Kolkata to Midnapore  
Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-midnapore> (<https://www.redbus.in/bus-tickets/kolkata-to-midnapore>)  
Route Name: Kolkata to Asansol (West Bengal)  
Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-asansol> (<https://www.redbus.in/bus-tickets/kolkata-to-asansol>)  
Route Name: Kolkata to Nimtouri  
Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-nimtouri> (<https://www.redbus.in/bus-tickets/kolkata-to-nimtouri>)  
Route Name: Jhargram to Kolkata  
Route Link: <https://www.redbus.in/bus-tickets/jhargram-to-kolkata> (<https://www.redbus.in/bus-tickets/jhargram-to-kolkata>)  
Route Name: Kolkata to Contai (Kanthi)  
Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-contai-kanthi> (<https://www.redbus.in/bus-tickets/kolkata-to-contai-kanthi>)  
Route Name: Kolkata to Kolaghat  
Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-kolaghat> (<https://www.redbus.in/bus-tickets/kolkata-to-kolaghat>)  
Route Name: Kolkata to Nandakumar (west bengal)  
Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-nandakumar> (<https://www.redbus.in/bus-tickets/kolkata-to-nandakumar>)  
Route Name: Kolkata to Mecheda (West Bengal)  
Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-mecheda-west-bengal> (<https://www.redbus.in/bus-tickets/kolkata-to-mecheda-west-bengal>)  
Route Name: Digha to Durgapur (West Bengal)  
Route Link: <https://www.redbus.in/bus-tickets/digha-to-durgapur> (<https://www.redbus.in/bus-tickets/digha-to-durgapur>)  
Route Name: Midnapore to Barasat (West Bengal)  
Route Link: <https://www.redbus.in/bus-tickets/midnapore-to-barasat-west-bengal> (<https://www.redbus.in/bus-tickets/midnapore-to-barasat-west-bengal>)  
Clicking on page 3  
Successfully navigated to page 3  
Route Name: Durgapur (West Bengal) to Digha  
Route Link: <https://www.redbus.in/bus-tickets/durgapur-to-digha> (<https://www.redbus.in/bus-tickets/durgapur-to-digha>)  
Route Name: Kolkata to Chandipur (West Bengal)  
Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-chandipur-west-bengal> (<https://www.redbus.in/bus-tickets/kolkata-to-chandipur-west-bengal>)  
Route Name: Barasat (West Bengal) to Midnapore  
Route Link: <https://www.redbus.in/bus-tickets/barasat-west-bengal-to-midnapore> (<https://www.redbus.in/bus-tickets/barasat-west-bengal-to-midnapore>)  
Route Name: Kolkata to Debra  
Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-debra> (<https://www.redbus.in/bus-tickets/kolkata-to-debra>)  
Route Name: Kirnahar (West Bengal) to Kolkata  
Route Link: <https://www.redbus.in/bus-tickets/kirnahar-west-bengal-to-kolkata> (<https://www.redbus.in/bus-tickets/kirnahar-west-bengal-to-kolkata>)  
Route Name: Kolkata to Panskura  
Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-panskura> (<https://www.redbus.in/bus-tickets/kolkata-to-panskura>)  
Route Name: Kolkata to Heria  
Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-heria> (<https://www.redbus.in/bus-tickets/kolkata-to-heria>)

[tps://www.redbus.in/bus-tickets/kolkata-to-heria](https://www.redbus.in/bus-tickets/kolkata-to-heria))

Route Name: Digha to Barasat (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/digha-to-barasat-west-bengal> (<https://www.redbus.in/bus-tickets/digha-to-barasat-west-bengal>)

Route Name: Illambazar to Kolkata

Route Link: <https://www.redbus.in/bus-tickets/illambazar-to-kolkata> (<https://www.redbus.in/bus-tickets/illambazar-to-kolkata>)

Route Name: Kolkata to Suri

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-suri> (<https://www.redbus.in/bus-tickets/kolkata-to-suri>)

Clicking on page 4

Successfully navigated to page 4

Route Name: Berhampore (West Bengal) to Durgapur (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/berhampore-to-durgapur> (<https://www.redbus.in/bus-tickets/berhampore-to-durgapur>)

Route Name: Purulia to Durgapur (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/purulia-to-durgapur> (<https://www.redbus.in/bus-tickets/purulia-to-durgapur>)

Route Name: Durgapur (West Bengal) to Berhampore (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/durgapur-to-berhampore> (<https://www.redbus.in/bus-tickets/durgapur-to-berhampore>)

Route Name: Kolkata to Futishanko

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-futishanko> (<https://www.redbus.in/bus-tickets/kolkata-to-futishanko>)

Route Name: Kolkata to Kirnagar (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-kirnagar-west-bengal> (<https://www.redbus.in/bus-tickets/kolkata-to-kirnagar-west-bengal>)

Route Name: Durgapur (West Bengal) to Barasat (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/durgapur-to-barasat-west-bengal> (<https://www.redbus.in/bus-tickets/durgapur-to-barasat-west-bengal>)

Route Name: Kolkata to Ramnagar (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-ramnagar-west-bengal> (<https://www.redbus.in/bus-tickets/kolkata-to-ramnagar-west-bengal>)

Route Name: Durgapur (West Bengal) to Purulia

Route Link: <https://www.redbus.in/bus-tickets/durgapur-to-purulia> (<https://www.redbus.in/bus-tickets/durgapur-to-purulia>)

Route Name: Durgapur (West Bengal) to Bankura

Route Link: <https://www.redbus.in/bus-tickets/durgapur-to-bankura> (<https://www.redbus.in/bus-tickets/durgapur-to-bankura>)

Route Name: Kolkata to Ashari

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-ashari> (<https://www.redbus.in/bus-tickets/kolkata-to-ashari>)

Clicking on page 5

Successfully navigated to page 5

Route Name: Barasat (West Bengal) to Digha

Route Link: <https://www.redbus.in/bus-tickets/barasat-west-bengal-to-digha> (<https://www.redbus.in/bus-tickets/barasat-west-bengal-to-digha>)

```
In [38]: df_sb = pd.DataFrame(sb_data)

df_sb.to_csv("/Users/jainivedhitha/Desktop/scraped_routes_sb.csv",
print(df_sb.head())
```

	Route Name \
0	Durgapur to Calcutta
1	Kolkata to Burdwan
2	Haldia to Calcutta
3	Kolkata to Haldia
4	Kolkata to Durgapur (West Bengal)

	Route Link
0	<a href="https://www.redbus.in/bus-tickets/durgapur-to-...">https://www.redbus.in/bus-tickets/durgapur-to-...</a> ( <a href="https://www.redbus.in/bus-tickets/durgapur-to-...">https://www.redbus.in/bus-tickets/durgapur-to-...</a> )
1	<a href="https://www.redbus.in/bus-tickets/kolkata-to-b...">https://www.redbus.in/bus-tickets/kolkata-to-b...</a> ( <a href="https://www.redbus.in/bus-tickets/kolkata-to-b...">https://www.redbus.in/bus-tickets/kolkata-to-b...</a> )
2	<a href="https://www.redbus.in/bus-tickets/haldia-to-ko...">https://www.redbus.in/bus-tickets/haldia-to-ko...</a> ( <a href="https://www.redbus.in/bus-tickets/haldia-to-ko...">https://www.redbus.in/bus-tickets/haldia-to-ko...</a> )
3	<a href="https://www.redbus.in/bus-tickets/kolkata-to-h...">https://www.redbus.in/bus-tickets/kolkata-to-h...</a> ( <a href="https://www.redbus.in/bus-tickets/kolkata-to-h...">https://www.redbus.in/bus-tickets/kolkata-to-h...</a> )
4	<a href="https://www.redbus.in/bus-tickets/kolkata-to-d...">https://www.redbus.in/bus-tickets/kolkata-to-d...</a> ( <a href="https://www.redbus.in/bus-tickets/kolkata-to-d...">https://www.redbus.in/bus-tickets/kolkata-to-d...</a> )

HIMACHAL

```
In [39]: driver.get("https://www.redbus.in/online-booking/hrtc/?utm_source=r
```

```
In [40]: him_data = []
```

```
In [41]: def select_date(travel_day):
    try:
        # Click on the date picker to open the calendar
        date_input = driver.find_element(By.ID, 'onward_cal')
        date_input.click()

        # Wait until the calendar is visible and select the desired
        WebDriverWait(driver, 10).until(
            EC.element_to_be_clickable((By.XPATH, f"//td[@class='wd
        ).click()
    except Exception as e:
        print(f"An error occurred while selecting the date: {e}")
```

```

In [42]: # Step 1: Use XPath to directly select the route elements (anchor t
def scrape_page():
    route_elements = driver.find_elements(By.XPATH, '//a[@class="ro
    for route_element in route_elements:
        try:
            routename_him = route_element.text
            routelink_him = route_element.get_attribute('href')

            him_data.append({
                "Route Name": routename_him,
                "Route Link": routelink_him
            })

        # Print for debugging purposes
        print(f"Route Name: {routename_him}")
        print(f"Route Link: {routelink_him}")

    except Exception as e:
        # Handle any exceptions that may occur (like element not fo
        print(f"An error occurred: {e}")
        continue

```

```

In [43]: # Scrape data from the first 5 pages
for page_number in range(1, 5):
    scrape_page()
    if page_number < 4: # Don't try to click next on the last page
        try:
            # Locate the pagination container
            pagination_container = wait.until(EC.presence_of_element
                (By.XPATH, '//*[@id="root"]/div/div[4]/div[12]'))

            # Locate the next page button within the container
            next_page_button = pagination_container.find_element(
                By.XPATH, f'./div[contains(@class, "DC_117_pageTab
            )

            # Ensure the next page button is in view
            actions = ActionChains(driver)
            actions.move_to_element(next_page_button).perform()
            time.sleep(1) # Wait for a bit after scrolling

            # Log the action
            print(f"Clicking on page {page_number + 1}")

            # Click the next page button
            next_page_button.click()

            # Wait for the page number to update to the next page
            wait.until(EC.text_to_be_present_in_element(
                (By.XPATH, '//div[contains(@class, "DC_117_pageTabs

            # Log the successful page navigation
            print(f"Successfully navigated to page {page_number + 1

```

```
# Wait for a short duration to ensure the next page loads
time.sleep(3)
except Exception as e:
    print(f"An error occurred while navigating to page {page}")
    break
```

Route Name: Delhi to Shimla

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-shimla> (<https://www.redbus.in/bus-tickets/delhi-to-shimla>)

Route Name: Chandigarh to Hamirpur (Himachal Pradesh)

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-hamirpur-himachal-pradesh> (<https://www.redbus.in/bus-tickets/chandigarh-to-hamirpur-himachal-pradesh>)

Route Name: Hamirpur (Himachal Pradesh) to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/hamirpur-himachal-pradesh-to-chandigarh> (<https://www.redbus.in/bus-tickets/hamirpur-himachal-pradesh-to-chandigarh>)

Route Name: Shimla to Delhi

Route Link: <https://www.redbus.in/bus-tickets/shimla-to-delhi> (<https://www.redbus.in/bus-tickets/shimla-to-delhi>)

Route Name: Delhi to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-chandigarh> (<https://www.redbus.in/bus-tickets/delhi-to-chandigarh>)

Route Name: Hamirpur (Himachal Pradesh) to Delhi

Route Link: <https://www.redbus.in/bus-tickets/hamirpur-himachal-pradesh-to-delhi> (<https://www.redbus.in/bus-tickets/hamirpur-himachal-pradesh-to-delhi>)

Route Name: Chamba (Himachal Pradesh) to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/chamba-himachal-pradesh-to-chandigarh> (<https://www.redbus.in/bus-tickets/chamba-himachal-pradesh-to-chandigarh>)

Route Name: Delhi to Hamirpur (Himachal Pradesh)

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-hamirpur-himachal-pradesh> (<https://www.redbus.in/bus-tickets/delhi-to-hamirpur-himachal-pradesh>)

Route Name: Chandigarh to Dharamshala (Himachal Pradesh)

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-dharamshala> (<https://www.redbus.in/bus-tickets/chandigarh-to-dharamshala>)

Route Name: Delhi to Chamba (Himachal Pradesh)

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-chamba-himachal-pradesh> (<https://www.redbus.in/bus-tickets/delhi-to-chamba-himachal-pradesh>)

Clicking on page 2

Successfully navigated to page 2

Route Name: Chamba (Himachal Pradesh) to Delhi

Route Link: <https://www.redbus.in/bus-tickets/chamba-himachal-pradesh-to-delhi> (<https://www.redbus.in/bus-tickets/chamba-himachal-pradesh-to-delhi>)

Route Name: Kangra to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/kangra-to-chandigarh> (<https://www.redbus.in/bus-tickets/kangra-to-chandigarh>)

Route Name: Shimla to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/shimla-to-chandigarh> (<https://www.redbus.in/bus-tickets/shimla-to-chandigarh>)



Route Name: Delhi to Baddi (Himachal Pradesh)

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-baddi-himachal-pradesh> (<https://www.redbus.in/bus-tickets/delhi-to-baddi-himachal-pradesh>)

Route Name: Delhi to Solan

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-solan> (<https://www.redbus.in/bus-tickets/delhi-to-solan>)

Route Name: Delhi to Nalagarh

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-nalagarh> (<https://www.redbus.in/bus-tickets/delhi-to-nalagarh>)

Route Name: Dharamshala (Himachal Pradesh) to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/dharamshala-to-chandigarh> (<https://www.redbus.in/bus-tickets/dharamshala-to-chandigarh>)

Route Name: Palampur to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/palampur-to-chandigarh> (<https://www.redbus.in/bus-tickets/palampur-to-chandigarh>)

Route Name: Ghumarwin to Delhi

Route Link: <https://www.redbus.in/bus-tickets/ghumarwin-to-delhi> (<https://www.redbus.in/bus-tickets/ghumarwin-to-delhi>)

Route Name: Chandigarh to Kangra

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-kangra> (<https://www.redbus.in/bus-tickets/chandigarh-to-kangra>)

Clicking on page 3

Successfully navigated to page 3

Route Name: Baddi (Himachal Pradesh) to Delhi

Route Link: <https://www.redbus.in/bus-tickets/baddi-himachal-pradesh-to-delhi> (<https://www.redbus.in/bus-tickets/baddi-himachal-pradesh-to-delhi>)

Route Name: Manali to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/manali-to-chandigarh> (<https://www.redbus.in/bus-tickets/manali-to-chandigarh>)

Route Name: Solan to Delhi

Route Link: <https://www.redbus.in/bus-tickets/solan-to-delhi> (<https://www.redbus.in/bus-tickets/solan-to-delhi>)

Route Name: Chandigarh to Manali

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-manali> (<https://www.redbus.in/bus-tickets/chandigarh-to-manali>)

Route Name: Delhi to Sarkaghat

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-sarkaghat> (<https://www.redbus.in/bus-tickets/delhi-to-sarkaghat>)

Route Name: Ghumarwin to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/ghumarwin-to-chandigarh> (<https://www.redbus.in/bus-tickets/ghumarwin-to-chandigarh>)

Route Name: Chandigarh to Kullu

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-kullu> (<https://www.redbus.in/bus-tickets/chandigarh-to-kullu>)

Route Name: Delhi to Bilaspur (Himachal Pradesh)

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-bilaspur-himachal-pradesh> (<https://www.redbus.in/bus-tickets/delhi-to-bilaspur-himachal-pradesh>)

Route Name: Delhi to Ghumarwin

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-ghumarwin> (<https://www.redbus.in/bus-tickets/delhi-to-ghumarwin>)

Route Name: Chamba (Himachal Pradesh) to Shimla

Route Link: <https://www.redbus.in/bus-tickets/chamba-himachal-pradesh-to-shimla> (<https://www.redbus.in/bus-tickets/chamba-himachal-pradesh-to-shimla>)

radesh-to-shimla)

Clicking on page 4

Successfully navigated to page 4

Route Name: Delhi to Palampur

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-palampur> (<https://www.redbus.in/bus-tickets/delhi-to-palampur>)

Route Name: Chandigarh to Reckong Peo (Himachal Pradesh)

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-reckong-peo-himachal-pradesh> (<https://www.redbus.in/bus-tickets/chandigarh-to-reckong-peo-himachal-pradesh>)

Route Name: Bilaspur (Himachal Pradesh) to Delhi

Route Link: <https://www.redbus.in/bus-tickets/bilaspur-himachal-pradesh-to-delhi> (<https://www.redbus.in/bus-tickets/bilaspur-himachal-pradesh-to-delhi>)

Route Name: Sarkaghat to Delhi

Route Link: <https://www.redbus.in/bus-tickets/sarkaghat-to-delhi> (<https://www.redbus.in/bus-tickets/sarkaghat-to-delhi>)

Route Name: Manali to Delhi

Route Link: <https://www.redbus.in/bus-tickets/manali-to-delhi> (<https://www.redbus.in/bus-tickets/manali-to-delhi>)

```
In [44]: df_him = pd.DataFrame(him_data)

df_him.to_csv("/Users/jainivedhitha/Desktop/scraped_routes_him.csv")

print(df_him.head())
```

```

                                Route Name \
0                                Delhi to Shimla
1  Chandigarh to Hamirpur (Himachal Pradesh)
2  Hamirpur (Himachal Pradesh) to Chandigarh
3                                Shimla to Delhi
4                                Delhi to Chandigarh

                                Route Link
0  https://www.redbus.in/bus-tickets/delhi-to-shimla (https://www.
redbus.in/bus-tickets/delhi-to-shimla)
1  https://www.redbus.in/bus-tickets/chandigarh-t... (https://www.
redbus.in/bus-tickets/chandigarh-t...)
2  https://www.redbus.in/bus-tickets/hamirpur-him... (https://www.
redbus.in/bus-tickets/hamirpur-him...)
3  https://www.redbus.in/bus-tickets/shimla-to-delhi (https://www.
redbus.in/bus-tickets/shimla-to-delhi)
4  https://www.redbus.in/bus-tickets/delhi-to-cha... (https://www.
redbus.in/bus-tickets/delhi-to-cha...)
```

ASSAM

```
In [45]: driver.get("https://www.redbus.in/online-booking/astc/?utm_source=r
```

```
In [46]: ass_data = []
```

```
In [47]: def select_date(travel_day):
    try:
        # Click on the date picker to open the calendar
        date_input = driver.find_element(By.ID, 'onward_cal')
        date_input.click()

        # Wait until the calendar is visible and select the desired
        WebDriverWait(driver, 10).until(
            EC.element_to_be_clickable((By.XPATH, f'//td[@class="wd
        )).click()
    except Exception as e:
        print(f"An error occurred while selecting the date: {e}")
```

```
In [48]: # Step 1: Use XPath to directly select the route elements (anchor t
def scrape_page():
    route_elements = driver.find_elements(By.XPATH, '//a[@class="ro
    for route_element in route_elements:
        try:
            routename_ass = route_element.text
            routelink_ass = route_element.get_attribute('href')

            ass_data.append({
                "Route Name": routename_ass,
                "Route Link": routelink_ass
            })

            # Print for debugging purposes
            print(f"Route Name: {routename_ass}")
            print(f"Route Link: {routelink_ass}")

        except Exception as e:
            # Handle any exceptions that may occur (like element not fo
            print(f"An error occurred: {e}")
            continue
```

```
In [49]: # Scrape data from the first 5 pages
for page_number in range(1, 6):
    scrape_page()
    if page_number < 5: # Don't try to click next on the last page
        try:
            # Locate the pagination container
            pagination_container = wait.until(EC.presence_of_element_
                (By.XPATH, '//*[@id="root"]/div/div[4]/div[12]'))

            # Locate the next page button within the container
            next_page_button = pagination_container.find_element(
                By.XPATH, f'./div[contains(@class, "DC_117_pageTab
            )

            # Ensure the next page button is in view
            actions = ActionChains(driver)
            actions.move_to_element(next_page_button).perform()
            time.sleep(1) # Wait for a bit after scrolling
```

```

# Log the action
print(f"Clicking on page {page_number + 1}")

# Click the next page button
next_page_button.click()

# Wait for the page number to update to the next page
wait.until(EC.text_to_be_present_in_element(
    (By.XPATH, '//div[contains(@class, "DC_117_pageTabs

# Log the successful page navigation
print(f"Successfully navigated to page {page_number + 1

# Wait for a short duration to ensure the next page loa
time.sleep(3)
except Exception as e:
    print(f"An error occurred while navigating to page {pag
    break

```

Route Name: Tezpur to Guwahati

Route Link: <https://www.redbus.in/bus-tickets/tezpur-to-guwahati> (<https://www.redbus.in/bus-tickets/tezpur-to-guwahati>)

Route Name: Guwahati to Tezpur

Route Link: <https://www.redbus.in/bus-tickets/guwahati-to-tezpur> (<https://www.redbus.in/bus-tickets/guwahati-to-tezpur>)

Route Name: Guwahati to Nagaon (Assam)

Route Link: <https://www.redbus.in/bus-tickets/guwahati-to-nagaon> (<https://www.redbus.in/bus-tickets/guwahati-to-nagaon>)

Route Name: Nagaon (Assam) to Guwahati

Route Link: <https://www.redbus.in/bus-tickets/nagaon-to-guwahati> (<https://www.redbus.in/bus-tickets/nagaon-to-guwahati>)

Route Name: Goalpara to Guwahati

Route Link: <https://www.redbus.in/bus-tickets/goalpara-to-guwahati> (<https://www.redbus.in/bus-tickets/goalpara-to-guwahati>)

Route Name: Jorhat to North Lakhimpur

Route Link: <https://www.redbus.in/bus-tickets/jorhat-to-north-lakhimpur> (<https://www.redbus.in/bus-tickets/jorhat-to-north-lakhimpur>)

Route Name: Dhubri to Guwahati

Route Link: <https://www.redbus.in/bus-tickets/dhubri-to-guwahati> (<https://www.redbus.in/bus-tickets/dhubri-to-guwahati>)

Route Name: Jorhat to Dibrugarh

Route Link: <https://www.redbus.in/bus-tickets/jorhat-to-dibrugarh> (<https://www.redbus.in/bus-tickets/jorhat-to-dibrugarh>)

Route Name: North Lakhimpur to Jorhat

Route Link: <https://www.redbus.in/bus-tickets/north-lakhimpur-to-jorhat> (<https://www.redbus.in/bus-tickets/north-lakhimpur-to-jorhat>)

Route Name: North Lakhimpur to Sibsagar

Route Link: <https://www.redbus.in/bus-tickets/north-lakhimpur-to-sibsagar> (<https://www.redbus.in/bus-tickets/north-lakhimpur-to-sibsagar>)

Clicking on page 2

Successfully navigated to page 2

Route Name: Guwahati to Dhubri

Route Link: <https://www.redbus.in/bus-tickets/guwahati-to-dhubri> (<https://www.redbus.in/bus-tickets/guwahati-to-dhubri>)

Route Name: Dhekiajuli to Guwahati

Route Link: <https://www.redbus.in/bus-tickets/dhekiajuli-to-guwahati> (<https://www.redbus.in/bus-tickets/dhekiajuli-to-guwahati>)

Route Name: Sibsagar to North Lakhimpur

Route Link: <https://www.redbus.in/bus-tickets/sibsagar-to-north-lakhimpur> (<https://www.redbus.in/bus-tickets/sibsagar-to-north-lakhimpur>)

Route Name: Dibrugarh to Jorhat

Route Link: <https://www.redbus.in/bus-tickets/dibrugarh-to-jorhat> (<https://www.redbus.in/bus-tickets/dibrugarh-to-jorhat>)

Route Name: Jorhat to Dhemaji

Route Link: <https://www.redbus.in/bus-tickets/jorhat-to-dhemaji> (<https://www.redbus.in/bus-tickets/jorhat-to-dhemaji>)

Route Name: Jorhat to Tinsukia

Route Link: <https://www.redbus.in/bus-tickets/jorhat-to-tinsukia> (<https://www.redbus.in/bus-tickets/jorhat-to-tinsukia>)

Route Name: Tezpur to Dibrugarh

Route Link: <https://www.redbus.in/bus-tickets/tezpur-to-dibrugarh> (<https://www.redbus.in/bus-tickets/tezpur-to-dibrugarh>)

Route Name: Dhemaji to Jorhat

Route Link: <https://www.redbus.in/bus-tickets/dhemaji-to-jorhat> (<https://www.redbus.in/bus-tickets/dhemaji-to-jorhat>)

Route Name: North Lakhimpur to Tezpur

Route Link: <https://www.redbus.in/bus-tickets/north-lakhimpur-to-tezpur> (<https://www.redbus.in/bus-tickets/north-lakhimpur-to-tezpur>)

Route Name: Guwahati to Biswanath Charali

Route Link: <https://www.redbus.in/bus-tickets/guwahati-to-biswanath-charali> (<https://www.redbus.in/bus-tickets/guwahati-to-biswanath-charali>)

Clicking on page 3

Successfully navigated to page 3

Route Name: North Lakhimpur to Dibrugarh

Route Link: <https://www.redbus.in/bus-tickets/north-lakhimpur-to-dibrugarh> (<https://www.redbus.in/bus-tickets/north-lakhimpur-to-dibrugarh>)

Route Name: Tinsukia to Jorhat

Route Link: <https://www.redbus.in/bus-tickets/tinsukia-to-jorhat> (<https://www.redbus.in/bus-tickets/tinsukia-to-jorhat>)

Route Name: Tezpur to North Lakhimpur

Route Link: <https://www.redbus.in/bus-tickets/tezpur-to-north-lakhimpur> (<https://www.redbus.in/bus-tickets/tezpur-to-north-lakhimpur>)

Route Name: North Lakhimpur to Moran

Route Link: <https://www.redbus.in/bus-tickets/north-lakhimpur-to-moran> (<https://www.redbus.in/bus-tickets/north-lakhimpur-to-moran>)

Route Name: Guwahati to Gohpur

Route Link: <https://www.redbus.in/bus-tickets/guwahati-to-gohpur> (<https://www.redbus.in/bus-tickets/guwahati-to-gohpur>)

Route Name: Guwahati to Kaliabor

Route Link: <https://www.redbus.in/bus-tickets/guwahati-to-kaliabor> (<https://www.redbus.in/bus-tickets/guwahati-to-kaliabor>)

Route Name: Guwahati to Tumuki (Tezpur Medical)

Route Link: <https://www.redbus.in/bus-tickets/guwahati-to-tumuki-t>

ezpur-medical (<https://www.redbus.in/bus-tickets/guwahati-to-tumuki-tezpur-medical>)

Route Name: Dibrugarh to Tezpur

Route Link: <https://www.redbus.in/bus-tickets/dibrugarh-to-tezpur> (<https://www.redbus.in/bus-tickets/dibrugarh-to-tezpur>)

Route Name: Biswanath Charali to Guwahati

Route Link: <https://www.redbus.in/bus-tickets/biswanath-charali-to-guwahati> (<https://www.redbus.in/bus-tickets/biswanath-charali-to-guwahati>)

Route Name: Dibrugarh to North Lakhimpur

Route Link: <https://www.redbus.in/bus-tickets/dibrugarh-to-north-lakhimpur> (<https://www.redbus.in/bus-tickets/dibrugarh-to-north-lakhimpur>)

Clicking on page 4

Successfully navigated to page 4

Route Name: Moran to North Lakhimpur

Route Link: <https://www.redbus.in/bus-tickets/moran-to-north-lakhimpur> (<https://www.redbus.in/bus-tickets/moran-to-north-lakhimpur>)

Route Name: Tumuki (Tezpur Medical) to Guwahati

Route Link: <https://www.redbus.in/bus-tickets/tumuki-tezpur-medical-to-guwahati> (<https://www.redbus.in/bus-tickets/tumuki-tezpur-medical-to-guwahati>)

Route Name: Biswanath Charali to Dibrugarh

Route Link: <https://www.redbus.in/bus-tickets/biswanath-charali-to-dibrugarh> (<https://www.redbus.in/bus-tickets/biswanath-charali-to-dibrugarh>)

Route Name: Gohpur to Guwahati

Route Link: <https://www.redbus.in/bus-tickets/gohpur-to-guwahati> (<https://www.redbus.in/bus-tickets/gohpur-to-guwahati>)

Route Name: Sibsagar to Dhemaji

Route Link: <https://www.redbus.in/bus-tickets/sibsagar-to-dhemaji> (<https://www.redbus.in/bus-tickets/sibsagar-to-dhemaji>)

Route Name: North Lakhimpur to Guwahati

Route Link: <https://www.redbus.in/bus-tickets/north-lakhimpur-to-guwahati> (<https://www.redbus.in/bus-tickets/north-lakhimpur-to-guwahati>)

Route Name: Haflong to Guwahati

Route Link: <https://www.redbus.in/bus-tickets/haflong-to-guwahati> (<https://www.redbus.in/bus-tickets/haflong-to-guwahati>)

Route Name: Tezpur to Moran

Route Link: <https://www.redbus.in/bus-tickets/tezpur-to-moran> (<https://www.redbus.in/bus-tickets/tezpur-to-moran>)

Route Name: Moran to Tezpur

Route Link: <https://www.redbus.in/bus-tickets/moran-to-tezpur> (<https://www.redbus.in/bus-tickets/moran-to-tezpur>)

Route Name: Bokakhat to Dibrugarh

Route Link: <https://www.redbus.in/bus-tickets/bokakhat-to-dibrugarh> (<https://www.redbus.in/bus-tickets/bokakhat-to-dibrugarh>)

Clicking on page 5

Successfully navigated to page 5

Route Name: North Lakhimpur to Nagaon (Assam)

Route Link: <https://www.redbus.in/bus-tickets/north-lakhimpur-to-nagaon> (<https://www.redbus.in/bus-tickets/north-lakhimpur-to-nagaon>)

Route Name: Bihpuria to Dibrugarh

Route Link: <https://www.redbus.in/bus-tickets/bihpuria-to-dibrugarh> (<https://www.redbus.in/bus-tickets/bihpuria-to-dibrugarh>)

Route Name: Haflong to Nagaon (Assam)  
Route Link: <https://www.redbus.in/bus-tickets/haflong-to-nagaon> (<https://www.redbus.in/bus-tickets/haflong-to-nagaon>)  
Route Name: Guwahati to Golaghat  
Route Link: <https://www.redbus.in/bus-tickets/guwahati-to-golaghat> (<https://www.redbus.in/bus-tickets/guwahati-to-golaghat>)  
Route Name: Jorhat to Gogamukh  
Route Link: <https://www.redbus.in/bus-tickets/jorhat-to-gogamukh> (<https://www.redbus.in/bus-tickets/jorhat-to-gogamukh>)  
Route Name: Dibrugarh to Biswanath Charali  
Route Link: <https://www.redbus.in/bus-tickets/dibrugarh-to-biswanath-charali> (<https://www.redbus.in/bus-tickets/dibrugarh-to-biswanath-charali>)  
Route Name: Golaghat to North Lakhimpur  
Route Link: <https://www.redbus.in/bus-tickets/golaghat-to-north-lakhimpur> (<https://www.redbus.in/bus-tickets/golaghat-to-north-lakhimpur>)

```
In [50]: df_ass = pd.DataFrame(ass_data)

df_ass.to_csv("/Users/jainivedhitha/Desktop/scraped_routes_ass.csv")

print(df_ass.head())
```

	Route Name \	Route Link
0	Tezpur to Guwahati	<a href="https://www.redbus.in/bus-tickets/tezpur-to-gu...">https://www.redbus.in/bus-tickets/tezpur-to-gu...</a> ( <a href="https://www.redbus.in/bus-tickets/tezpur-to-gu...">https://www.redbus.in/bus-tickets/tezpur-to-gu...</a> )
1	Guwahati to Tezpur	<a href="https://www.redbus.in/bus-tickets/guwahati-to-...">https://www.redbus.in/bus-tickets/guwahati-to-...</a> ( <a href="https://www.redbus.in/bus-tickets/guwahati-to-...">https://www.redbus.in/bus-tickets/guwahati-to-...</a> )
2	Guwahati to Nagaon (Assam)	<a href="https://www.redbus.in/bus-tickets/guwahati-to-...">https://www.redbus.in/bus-tickets/guwahati-to-...</a> ( <a href="https://www.redbus.in/bus-tickets/guwahati-to-...">https://www.redbus.in/bus-tickets/guwahati-to-...</a> )
3	Nagaon (Assam) to Guwahati	<a href="https://www.redbus.in/bus-tickets/nagaon-to-gu...">https://www.redbus.in/bus-tickets/nagaon-to-gu...</a> ( <a href="https://www.redbus.in/bus-tickets/nagaon-to-gu...">https://www.redbus.in/bus-tickets/nagaon-to-gu...</a> )
4	Goalpara to Guwahati	<a href="https://www.redbus.in/bus-tickets/goalpara-to-...">https://www.redbus.in/bus-tickets/goalpara-to-...</a> ( <a href="https://www.redbus.in/bus-tickets/goalpara-to-...">https://www.redbus.in/bus-tickets/goalpara-to-...</a> )

UTTAR PRADESH

```
In [51]: driver.get("https://www.redbus.in/online-booking/uttar-pradesh-stat
```

```
In [52]: utp_data = []
```



```
In [53]: def select_date(travel_day):
    try:
        # Click on the date picker to open the calendar
        date_input = driver.find_element(By.ID, 'onward_cal')
        date_input.click()

        # Wait until the calendar is visible and select the desired
        WebDriverWait(driver, 10).until(
            EC.element_to_be_clickable((By.XPATH, f'//td[@class="wd
        )).click()
    except Exception as e:
        print(f"An error occurred while selecting the date: {e}")
```

```
In [54]: # Step 1: Use XPath to directly select the route elements (anchor t
def scrape_page():
    route_elements = driver.find_elements(By.XPATH, '//a[@class="ro
    for route_element in route_elements:
        try:
            routename_otp = route_element.text
            routelink_otp = route_element.get_attribute('href')

            otp_data.append({
                "Route Name": routename_otp,
                "Route Link": routelink_otp
            })

            # Print for debugging purposes
            print(f"Route Name: {routename_otp}")
            print(f"Route Link: {routelink_otp}")

        except Exception as e:
            # Handle any exceptions that may occur (like element not fo
            print(f"An error occurred: {e}")
            continue
```

```
In [55]: # Scrape data from the first 5 pages
for page_number in range(1, 6):
    scrape_page()
    if page_number < 5: # Don't try to click next on the last page
        try:
            # Locate the pagination container
            pagination_container = wait.until(EC.presence_of_element_
                (By.XPATH, '//*[@id="root"]/div/div[4]/div[12]'))

            # Locate the next page button within the container
            next_page_button = pagination_container.find_element(
                By.XPATH, f'./div[contains(@class, "DC_117_pageTab
            )

            # Ensure the next page button is in view
            actions = ActionChains(driver)
            actions.move_to_element(next_page_button).perform()
            time.sleep(1) # Wait for a bit after scrolling
```



```

# Log the action
print(f"Clicking on page {page_number + 1}")

# Click the next page button
next_page_button.click()

# Wait for the page number to update to the next page
wait.until(EC.text_to_be_present_in_element(
    (By.XPATH, '//div[contains(@class, "DC_117_pageTabs

# Log the successful page navigation
print(f"Successfully navigated to page {page_number + 1

# Wait for a short duration to ensure the next page loa
time.sleep(3)
except Exception as e:
    print(f"An error occurred while navigating to page {pag
    break

```

Route Name: Delhi to Bareilly  
Route Link: <https://www.redbus.in/bus-tickets/delhi-to-bareilly> (<https://www.redbus.in/bus-tickets/delhi-to-bareilly>)  
Route Name: Bareilly to Delhi  
Route Link: <https://www.redbus.in/bus-tickets/bareilly-to-delhi> (<https://www.redbus.in/bus-tickets/bareilly-to-delhi>)  
Route Name: Aligarh (uttar pradesh) to Delhi  
Route Link: <https://www.redbus.in/bus-tickets/aligarh-uttar-pradesh-to-delhi> (<https://www.redbus.in/bus-tickets/aligarh-uttar-pradesh-to-delhi>)  
Route Name: Delhi to Aligarh (uttar pradesh)  
Route Link: <https://www.redbus.in/bus-tickets/delhi-to-aligarh-uttar-pradesh> (<https://www.redbus.in/bus-tickets/delhi-to-aligarh-uttar-pradesh>)  
Route Name: Lucknow to Allahabad  
Route Link: <https://www.redbus.in/bus-tickets/lucknow-to-allahabad> (<https://www.redbus.in/bus-tickets/lucknow-to-allahabad>)  
Route Name: Lucknow to Delhi  
Route Link: <https://www.redbus.in/bus-tickets/lucknow-to-delhi> (<https://www.redbus.in/bus-tickets/lucknow-to-delhi>)  
Route Name: Delhi to Farrukhabad (Uttar Pradesh)  
Route Link: <https://www.redbus.in/bus-tickets/delhi-to-farrukhabad-up> (<https://www.redbus.in/bus-tickets/delhi-to-farrukhabad-up>)  
Route Name: Farrukhabad (Uttar Pradesh) to Delhi  
Route Link: <https://www.redbus.in/bus-tickets/farrukhabad-up-to-delhi> (<https://www.redbus.in/bus-tickets/farrukhabad-up-to-delhi>)  
Route Name: Badaun to Delhi  
Route Link: <https://www.redbus.in/bus-tickets/badaun-to-delhi> (<https://www.redbus.in/bus-tickets/badaun-to-delhi>)  
Route Name: Allahabad to Lucknow  
Route Link: <https://www.redbus.in/bus-tickets/allahabad-to-lucknow> (<https://www.redbus.in/bus-tickets/allahabad-to-lucknow>)  
Clicking on page 2  
Successfully navigated to page 2  
Route Name: Lucknow to Agra

Route Link: <https://www.redbus.in/bus-tickets/lucknow-to-agra> (<https://www.redbus.in/bus-tickets/lucknow-to-agra>)

Route Name: Sitapur (Uttar Pradesh) to Delhi

Route Link: <https://www.redbus.in/bus-tickets/sitapur-to-delhi> (<https://www.redbus.in/bus-tickets/sitapur-to-delhi>)

Route Name: Delhi to Badaun

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-badaun> (<https://www.redbus.in/bus-tickets/delhi-to-badaun>)

Route Name: Delhi to Sitapur (Uttar Pradesh)

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-sitapur> (<https://www.redbus.in/bus-tickets/delhi-to-sitapur>)

Route Name: Agra to Delhi

Route Link: <https://www.redbus.in/bus-tickets/agra-to-delhi> (<https://www.redbus.in/bus-tickets/agra-to-delhi>)

Route Name: Delhi to Moradabad

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-moradabad> (<https://www.redbus.in/bus-tickets/delhi-to-moradabad>)

Route Name: Delhi to Lucknow

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-lucknow> (<https://www.redbus.in/bus-tickets/delhi-to-lucknow>)

Route Name: Agra to Lucknow

Route Link: <https://www.redbus.in/bus-tickets/agra-to-lucknow> (<https://www.redbus.in/bus-tickets/agra-to-lucknow>)

Route Name: Lucknow to Varanasi

Route Link: <https://www.redbus.in/bus-tickets/lucknow-to-varanasi> (<https://www.redbus.in/bus-tickets/lucknow-to-varanasi>)

Route Name: Agra to Bareilly

Route Link: <https://www.redbus.in/bus-tickets/agra-to-bareilly> (<https://www.redbus.in/bus-tickets/agra-to-bareilly>)

Clicking on page 3

Successfully navigated to page 3

Route Name: Lucknow to Bareilly

Route Link: <https://www.redbus.in/bus-tickets/lucknow-to-bareilly> (<https://www.redbus.in/bus-tickets/lucknow-to-bareilly>)

Route Name: Bareilly to Agra

Route Link: <https://www.redbus.in/bus-tickets/bareilly-to-agra> (<https://www.redbus.in/bus-tickets/bareilly-to-agra>)

Route Name: Delhi to Agra

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-agra> (<https://www.redbus.in/bus-tickets/delhi-to-agra>)

Route Name: Varanasi to Lucknow

Route Link: <https://www.redbus.in/bus-tickets/varanasi-to-lucknow> (<https://www.redbus.in/bus-tickets/varanasi-to-lucknow>)

Route Name: Moradabad to Delhi

Route Link: <https://www.redbus.in/bus-tickets/moradabad-to-delhi> (<https://www.redbus.in/bus-tickets/moradabad-to-delhi>)

Route Name: Kanpur (Uttar Pradesh) to Jhansi

Route Link: <https://www.redbus.in/bus-tickets/kanpur-to-jhansi> (<https://www.redbus.in/bus-tickets/kanpur-to-jhansi>)

Route Name: Delhi to Shahjahanpur (Uttar Pradesh)

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-shahjahanpur> (<https://www.redbus.in/bus-tickets/delhi-to-shahjahanpur>)

Route Name: Shahjahanpur (Uttar Pradesh) to Delhi

Route Link: <https://www.redbus.in/bus-tickets/shahjahanpur-to-delhi> (<https://www.redbus.in/bus-tickets/shahjahanpur-to-delhi>)

Route Name: Gorakhpur (uttar pradesh) to Lucknow

Route Link: <https://www.redbus.in/bus-tickets/gorakhpur-to-lucknow>

(<https://www.redbus.in/bus-tickets/gorakhpur-to-lucknow>)

Route Name: Kanpur (Uttar Pradesh) to Bareilly

Route Link: <https://www.redbus.in/bus-tickets/kanpur-to-bareilly> (<https://www.redbus.in/bus-tickets/kanpur-to-bareilly>)

Clicking on page 4

Successfully navigated to page 4

Route Name: Lucknow to Aligarh (uttar pradesh)

Route Link: <https://www.redbus.in/bus-tickets/lucknow-to-aligarh> (<https://www.redbus.in/bus-tickets/lucknow-to-aligarh>)

Route Name: Lucknow to Kanpur (Uttar Pradesh)

Route Link: <https://www.redbus.in/bus-tickets/lucknow-to-kanpur> (<https://www.redbus.in/bus-tickets/lucknow-to-kanpur>)

Route Name: Delhi to Pilibhit

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-pilibhit> (<https://www.redbus.in/bus-tickets/delhi-to-pilibhit>)

Route Name: Lucknow to Ballia

Route Link: <https://www.redbus.in/bus-tickets/lucknow-to-ballia> (<https://www.redbus.in/bus-tickets/lucknow-to-ballia>)

Route Name: Delhi to Etah (Uttar Pradesh)

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-etah-up> (<https://www.redbus.in/bus-tickets/delhi-to-etah-up>)

Route Name: Lucknow to Gorakhpur (uttar pradesh)

Route Link: <https://www.redbus.in/bus-tickets/lucknow-to-gorakhpur> (<https://www.redbus.in/bus-tickets/lucknow-to-gorakhpur>)

Route Name: Aligarh (uttar pradesh) to Lucknow

Route Link: <https://www.redbus.in/bus-tickets/aligarh-to-lucknow> (<https://www.redbus.in/bus-tickets/aligarh-to-lucknow>)

Route Name: Aligarh (uttar pradesh) to Agra

Route Link: <https://www.redbus.in/bus-tickets/aligarh-to-agra> (<https://www.redbus.in/bus-tickets/aligarh-to-agra>)

Route Name: Bareilly to Dehradun

Route Link: <https://www.redbus.in/bus-tickets/bareilly-to-dehradun> (<https://www.redbus.in/bus-tickets/bareilly-to-dehradun>)

Route Name: Pilibhit to Delhi

Route Link: <https://www.redbus.in/bus-tickets/pilibhit-to-delhi> (<https://www.redbus.in/bus-tickets/pilibhit-to-delhi>)

Clicking on page 5

Successfully navigated to page 5

Route Name: Bareilly to Lucknow

Route Link: <https://www.redbus.in/bus-tickets/bareilly-to-lucknow> (<https://www.redbus.in/bus-tickets/bareilly-to-lucknow>)

Route Name: Delhi to Dehradun

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-dehradun> (<https://www.redbus.in/bus-tickets/delhi-to-dehradun>)

Route Name: Varanasi to Allahabad

Route Link: <https://www.redbus.in/bus-tickets/varanasi-to-allahabad> (<https://www.redbus.in/bus-tickets/varanasi-to-allahabad>)

Route Name: Lucknow to Mathura

Route Link: <https://www.redbus.in/bus-tickets/lucknow-to-mathura> (<https://www.redbus.in/bus-tickets/lucknow-to-mathura>)

Route Name: Jhansi to Kanpur (Uttar Pradesh)

Route Link: <https://www.redbus.in/bus-tickets/jhansi-to-kanpur> (<https://www.redbus.in/bus-tickets/jhansi-to-kanpur>)

Route Name: Dehradun to Bareilly

Route Link: <https://www.redbus.in/bus-tickets/dehradun-to-bareilly> (<https://www.redbus.in/bus-tickets/dehradun-to-bareilly>)

Route Name: Kanpur (Uttar Pradesh) to Lucknow

Route Link: <https://www.redbus.in/bus-tickets/kanpur-to-lucknow> (<https://www.redbus.in/bus-tickets/kanpur-to-lucknow>)  
 Route Name: Aligarh (uttar pradesh) to Greater noida (uttar pradesh)  
 Route Link: <https://www.redbus.in/bus-tickets/aligarh-to-greater-noida> (<https://www.redbus.in/bus-tickets/aligarh-to-greater-noida>)  
 Route Name: Etah (Uttar Pradesh) to Delhi  
 Route Link: <https://www.redbus.in/bus-tickets/etah-up-to-delhi> (<https://www.redbus.in/bus-tickets/etah-up-to-delhi>)

```
In [56]: df_otp = pd.DataFrame(otp_data)

df_otp.to_csv("/Users/jainivedhitha/Desktop/scraped_routes_otp.csv")

print(df_otp.head())
```

	Route Name \	Route Link
0	Delhi to Bareilly	<a href="https://www.redbus.in/bus-tickets/delhi-to-bar...">https://www.redbus.in/bus-tickets/delhi-to-bar...</a> ( <a href="https://www.redbus.in/bus-tickets/delhi-to-bar...">https://www.redbus.in/bus-tickets/delhi-to-bar...</a> )
1	Bareilly to Delhi	<a href="https://www.redbus.in/bus-tickets/bareilly-to-...">https://www.redbus.in/bus-tickets/bareilly-to-...</a> ( <a href="https://www.redbus.in/bus-tickets/bareilly-to-...">https://www.redbus.in/bus-tickets/bareilly-to-...</a> )
2	Aligarh (uttar pradesh) to Delhi	<a href="https://www.redbus.in/bus-tickets/aligarh-utta...">https://www.redbus.in/bus-tickets/aligarh-utta...</a> ( <a href="https://www.redbus.in/bus-tickets/aligarh-utta...">https://www.redbus.in/bus-tickets/aligarh-utta...</a> )
3	Delhi to Aligarh (uttar pradesh)	<a href="https://www.redbus.in/bus-tickets/delhi-to-ali...">https://www.redbus.in/bus-tickets/delhi-to-ali...</a> ( <a href="https://www.redbus.in/bus-tickets/delhi-to-ali...">https://www.redbus.in/bus-tickets/delhi-to-ali...</a> )
4	Lucknow to Allahabad	<a href="https://www.redbus.in/bus-tickets/lucknow-to-a...">https://www.redbus.in/bus-tickets/lucknow-to-a...</a> ( <a href="https://www.redbus.in/bus-tickets/lucknow-to-a...">https://www.redbus.in/bus-tickets/lucknow-to-a...</a> )

WEST BENGAL

```
In [57]: driver.get("https://www.redbus.in/online-booking/wbtc-ctc/?utm_sour
```

```
In [58]: wb_data = []
```

```
In [59]: def select_date(travel_day):
    try:
        # Click on the date picker to open the calendar
        date_input = driver.find_element(By.ID, 'onward_cal')
        date_input.click()

        # Wait until the calendar is visible and select the desired
        WebDriverWait(driver, 10).until(
            EC.element_to_be_clickable((By.XPATH, f"//td[@class='wd
        ]).click()
    except Exception as e:
        print(f"An error occurred while selecting the date: {e}")
```

```

In [60]: # Step 1: Use XPath to directly select the route elements (anchor t
def scrape_page():
    route_elements = driver.find_elements(By.XPATH, '//a[@class="ro
    for route_element in route_elements:
        try:
            routename_wb = route_element.text
            routelink_wb = route_element.get_attribute('href')

            wb_data.append({
                "Route Name": routename_wb,
                "Route Link": routelink_wb
            })

        # Print for debugging purposes
        print(f"Route Name: {routename_wb}")
        print(f"Route Link: {routelink_wb}")

    except Exception as e:
        # Handle any exceptions that may occur (like element not fo
        print(f"An error occurred: {e}")
        continue

```

```

In [61]: # Scrape data from the first 5 pages
for page_number in range(1, 5):
    scrape_page()
    if page_number < 4: # Don't try to click next on the last page
        try:
            # Locate the pagination container
            pagination_container = wait.until(EC.presence_of_element
                (By.XPATH, '//*[@id="root"]/div/div[4]/div[12]'))

            # Locate the next page button within the container
            next_page_button = pagination_container.find_element(
                By.XPATH, f'./div[contains(@class, "DC_117_pageTab
            )

            # Ensure the next page button is in view
            actions = ActionChains(driver)
            actions.move_to_element(next_page_button).perform()
            time.sleep(1) # Wait for a bit after scrolling

            # Log the action
            print(f"Clicking on page {page_number + 1}")

            # Click the next page button
            next_page_button.click()

            # Wait for the page number to update to the next page
            wait.until(EC.text_to_be_present_in_element(
                (By.XPATH, '//div[contains(@class, "DC_117_pageTabs

            # Log the successful page navigation
            print(f"Successfully navigated to page {page_number + 1

```

```
# Wait for a short duration to ensure the next page loads
time.sleep(3)
except Exception as e:
    print(f"An error occurred while navigating to page {page}")
    break
```

Route Name: Digha to Barasat (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/digha-to-barasat-west-bengal> (<https://www.redbus.in/bus-tickets/digha-to-barasat-west-bengal>)

Route Name: Durgapur to Calcutta

Route Link: <https://www.redbus.in/bus-tickets/durgapur-to-kolkata> (<https://www.redbus.in/bus-tickets/durgapur-to-kolkata>)

Route Name: Digha to Calcutta

Route Link: <https://www.redbus.in/bus-tickets/digha-to-kolkata> (<https://www.redbus.in/bus-tickets/digha-to-kolkata>)

Route Name: Kolkata to Digha

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-digha> (<https://www.redbus.in/bus-tickets/kolkata-to-digha>)

Route Name: Barasat (West Bengal) to Digha

Route Link: <https://www.redbus.in/bus-tickets/barasat-west-bengal-to-digha> (<https://www.redbus.in/bus-tickets/barasat-west-bengal-to-digha>)

Route Name: Kolkata to Suri

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-suri> (<https://www.redbus.in/bus-tickets/kolkata-to-suri>)

Route Name: Barasat (West Bengal) to Midnapore

Route Link: <https://www.redbus.in/bus-tickets/barasat-west-bengal-to-midnapore> (<https://www.redbus.in/bus-tickets/barasat-west-bengal-to-midnapore>)

Route Name: Midnapore to Kolkata

Route Link: <https://www.redbus.in/bus-tickets/midnapore-to-kolkata> (<https://www.redbus.in/bus-tickets/midnapore-to-kolkata>)

Route Name: Barasat (West Bengal) to Kolaghat

Route Link: <https://www.redbus.in/bus-tickets/barasat-west-bengal-to-kolaghat> (<https://www.redbus.in/bus-tickets/barasat-west-bengal-to-kolaghat>)

Route Name: Barasat (West Bengal) to Contai (Kanthi)

Route Link: <https://www.redbus.in/bus-tickets/barasat-west-bengal-to-contai-kanthi> (<https://www.redbus.in/bus-tickets/barasat-west-bengal-to-contai-kanthi>)

Clicking on page 2

Successfully navigated to page 2

Route Name: Habra to Digha

Route Link: <https://www.redbus.in/bus-tickets/habra-to-digha> (<https://www.redbus.in/bus-tickets/habra-to-digha>)

Route Name: Barasat (West Bengal) to Nandakumar (west bengal)

Route Link: <https://www.redbus.in/bus-tickets/barasat-west-bengal-to-nandakumar> (<https://www.redbus.in/bus-tickets/barasat-west-bengal-to-nandakumar>)

Route Name: Kolkata to Durgapur (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-durgapur> (<https://www.redbus.in/bus-tickets/kolkata-to-durgapur>)

Route Name: Digha to Habra

Route Link: <https://www.redbus.in/bus-tickets/digha-to-habra> (<https://www.redbus.in/bus-tickets/digha-to-habra>)

[s://www.redbus.in/bus-tickets/digha-to-habra](https://www.redbus.in/bus-tickets/digha-to-habra))

Route Name: Midnapore to Barasat (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/midnapore-to-barasat-west-bengal> (<https://www.redbus.in/bus-tickets/midnapore-to-barasat-west-bengal>)

Route Name: Kolkata to Bolpur (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-bolpur-west-bengal> (<https://www.redbus.in/bus-tickets/kolkata-to-bolpur-west-bengal>)

Route Name: Barasat (West Bengal) to Durgapur (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/barasat-west-bengal-to-durgapur> (<https://www.redbus.in/bus-tickets/barasat-west-bengal-to-durgapur>)

Route Name: Barasat (West Bengal) to Heria

Route Link: <https://www.redbus.in/bus-tickets/barasat-west-bengal-to-heria> (<https://www.redbus.in/bus-tickets/barasat-west-bengal-to-heria>)

Route Name: Haldia to Barasat (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/haldia-to-barasat-west-bengal> (<https://www.redbus.in/bus-tickets/haldia-to-barasat-west-bengal>)

Route Name: Barasat (West Bengal) to Haldia

Route Link: <https://www.redbus.in/bus-tickets/barasat-west-bengal-to-haldia> (<https://www.redbus.in/bus-tickets/barasat-west-bengal-to-haldia>)

Clicking on page 3

Successfully navigated to page 3

Route Name: Haldia to Kolkata

Route Link: <https://www.redbus.in/bus-tickets/haldia-to-kolkata> (<https://www.redbus.in/bus-tickets/haldia-to-kolkata>)

Route Name: Barasat (West Bengal) to Debra

Route Link: <https://www.redbus.in/bus-tickets/barasat-west-bengal-to-debra> (<https://www.redbus.in/bus-tickets/barasat-west-bengal-to-debra>)

Route Name: Barasat (West Bengal) to Burdwan

Route Link: <https://www.redbus.in/bus-tickets/barasat-west-bengal-to-burdwan> (<https://www.redbus.in/bus-tickets/barasat-west-bengal-to-burdwan>)

Route Name: Kolkata to Bakkhali

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-bakkhali> (<https://www.redbus.in/bus-tickets/kolkata-to-bakkhali>)

Route Name: Kolkata to Purulia

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-purulia> (<https://www.redbus.in/bus-tickets/kolkata-to-purulia>)

Route Name: Durgapur (West Bengal) to Purulia

Route Link: <https://www.redbus.in/bus-tickets/durgapur-to-purulia> (<https://www.redbus.in/bus-tickets/durgapur-to-purulia>)

Route Name: Habra to Midnapore

Route Link: <https://www.redbus.in/bus-tickets/habra-to-midnapore> (<https://www.redbus.in/bus-tickets/habra-to-midnapore>)

Route Name: Kolkata to Asansol (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-asansol> (<https://www.redbus.in/bus-tickets/kolkata-to-asansol>)

Route Name: Durgapur (West Bengal) to Barasat (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/durgapur-to-barasat-west-bengal> (<https://www.redbus.in/bus-tickets/durgapur-to-barasat-west-bengal>)



Route Name: Barasat (West Bengal) to Asansol (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/barasat-west-bengal-to-asansol> (<https://www.redbus.in/bus-tickets/barasat-west-bengal-to-asansol>)

Clicking on page 4

Successfully navigated to page 4

Route Name: Jayrambati (West Bengal) to Barasat (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/jayrambati-west-bengal-to-barasat-west-bengal> (<https://www.redbus.in/bus-tickets/jayrambati-west-bengal-to-barasat-west-bengal>)

Route Name: Kolkata to Haldia

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-haldia> (<https://www.redbus.in/bus-tickets/kolkata-to-haldia>)

Route Name: Habra to Durgapur (West Bengal)

Route Link: <https://www.redbus.in/bus-tickets/habra-to-durgapur> (<https://www.redbus.in/bus-tickets/habra-to-durgapur>)

Route Name: Habra to Nandakumar (west bengal)

Route Link: <https://www.redbus.in/bus-tickets/habra-to-nandakumar> (<https://www.redbus.in/bus-tickets/habra-to-nandakumar>)

Route Name: Habra to Kolaghat

Route Link: <https://www.redbus.in/bus-tickets/habra-to-kolaghat> (<https://www.redbus.in/bus-tickets/habra-to-kolaghat>)

Route Name: Kolkata to Mayapur ISKCON

Route Link: <https://www.redbus.in/bus-tickets/kolkata-to-mayapur-iskcon> (<https://www.redbus.in/bus-tickets/kolkata-to-mayapur-iskcon>)

Route Name: Habra to Heria

Route Link: <https://www.redbus.in/bus-tickets/habra-to-heria> (<https://www.redbus.in/bus-tickets/habra-to-heria>)

Route Name: Midnapore to Kolkata Airport

Route Link: <https://www.redbus.in/bus-tickets/midnapore-to-kolkata-airport> (<https://www.redbus.in/bus-tickets/midnapore-to-kolkata-airport>)



```
In [62]: df_wb = pd.DataFrame(wb_data)

df_wb.to_csv("/Users/jainivedhitha/Desktop/scraped_routes_wb.csv",
print(df_wb.head())
```

```

Route Name \
0  Digha to Barasat (West Bengal)
1      Durgapur to Calcutta
2      Digha to Calcutta
3      Kolkata to Digha
4  Barasat (West Bengal) to Digha
```

```

Route Link
0  https://www.redbus.in/bus-tickets/digha-to-bar... (https://www.
redbus.in/bus-tickets/digha-to-bar...)
1  https://www.redbus.in/bus-tickets/durgapur-to-... (https://www.
redbus.in/bus-tickets/durgapur-to-...)
2  https://www.redbus.in/bus-tickets/digha-to-kol... (https://www.
redbus.in/bus-tickets/digha-to-kol...)
3  https://www.redbus.in/bus-tickets/kolkata-to-d... (https://www.
redbus.in/bus-tickets/kolkata-to-d...)
4  https://www.redbus.in/bus-tickets/barasat-west... (https://www.
redbus.in/bus-tickets/barasat-west...)
```

CHANDIGARH

```
In [63]: driver.get("https://www.redbus.in/online-booking/chandigarh-transpo
```

```
In [64]: cha_data = []
```

```
In [65]: def select_date(travel_day):
    try:
        # Click on the date picker to open the calendar
        date_input = driver.find_element(By.ID, 'onward_cal')
        date_input.click()

        # Wait until the calendar is visible and select the desired
        WebDriverWait(driver, 10).until(
            EC.element_to_be_clickable((By.XPATH, f"//td[@class='wd
        )).click()
    except Exception as e:
        print(f"An error occurred while selecting the date: {e}")
```

```

In [66]: # Step 1: Use XPath to directly select the route elements (anchor t
def scrape_page():
    route_elements = driver.find_elements(By.XPATH, '//a[@class="ro
    for route_element in route_elements:
        try:
            routename_cha = route_element.text
            routelink_cha = route_element.get_attribute('href')

            cha_data.append({
                "Route Name": routename_cha,
                "Route Link": routelink_cha
            })

        # Print for debugging purposes
        print(f"Route Name: {routename_cha}")
        print(f"Route Link: {routelink_cha}")

    except Exception as e:
        # Handle any exceptions that may occur (like element not fo
        print(f"An error occurred: {e}")
        continue

```

```

In [67]: # Scrape data from the first 5 pages
for page_number in range(1, 6):
    scrape_page()
    if page_number < 5: # Don't try to click next on the last page
        try:
            # Locate the pagination container
            pagination_container = wait.until(EC.presence_of_element_
                (By.XPATH, '//*[@id="root"]/div/div[4]/div[12]'))

            # Locate the next page button within the container
            next_page_button = pagination_container.find_element(
                By.XPATH, f'./div[contains(@class, "DC_117_pageTab
            )

            # Ensure the next page button is in view
            actions = ActionChains(driver)
            actions.move_to_element(next_page_button).perform()
            time.sleep(1) # Wait for a bit after scrolling

            # Log the action
            print(f"Clicking on page {page_number + 1}")

            # Click the next page button
            next_page_button.click()

            # Wait for the page number to update to the next page
            wait.until(EC.text_to_be_present_in_element(
                (By.XPATH, '//div[contains(@class, "DC_117_pageTabs

            # Log the successful page navigation
            print(f"Successfully navigated to page {page_number + 1

```

```
        # Wait for a short duration to ensure the next page loa
        time.sleep(3)
    except Exception as e:
        print(f"An error occurred while navigating to page {pag
        break
```

Route Name: Yamuna Nagar to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/yamuna-nagar-to-chandigarh> (<https://www.redbus.in/bus-tickets/yamuna-nagar-to-chandigarh>)

Route Name: Chandigarh to Delhi

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-delhi> (<https://www.redbus.in/bus-tickets/chandigarh-to-delhi>)

Route Name: Delhi to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/delhi-to-chandigarh> (<https://www.redbus.in/bus-tickets/delhi-to-chandigarh>)

Route Name: Ludhiana to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/ludhiana-to-chandigarh> (<https://www.redbus.in/bus-tickets/ludhiana-to-chandigarh>)

Route Name: Chandigarh to Yamuna Nagar

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-yamuna-nagar> (<https://www.redbus.in/bus-tickets/chandigarh-to-yamuna-nagar>)

Route Name: Chandigarh to Ludhiana

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-ludhiana> (<https://www.redbus.in/bus-tickets/chandigarh-to-ludhiana>)

Route Name: Hamirpur (Himachal Pradesh) to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/hamirpur-himachal-pradesh-to-chandigarh> (<https://www.redbus.in/bus-tickets/hamirpur-himachal-pradesh-to-chandigarh>)

Route Name: Chandigarh to Vrindavan

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-vrindavan> (<https://www.redbus.in/bus-tickets/chandigarh-to-vrindavan>)

Route Name: Chandigarh to Hamirpur (Himachal Pradesh)

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-hamirpur-himachal-pradesh> (<https://www.redbus.in/bus-tickets/chandigarh-to-hamirpur-himachal-pradesh>)

Route Name: Chandigarh to Pathankot

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-pathankot> (<https://www.redbus.in/bus-tickets/chandigarh-to-pathankot>)

Clicking on page 2

Successfully navigated to page 2

Route Name: Chandigarh to Dehradun

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-dehradun> (<https://www.redbus.in/bus-tickets/chandigarh-to-dehradun>)

Route Name: Dehradun to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/dehradun-to-chandigarh> (<https://www.redbus.in/bus-tickets/dehradun-to-chandigarh>)

Route Name: Pathankot to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/pathankot-to-chandigarh> (<https://www.redbus.in/bus-tickets/pathankot-to-chandigarh>)

Route Name: Sujanpur (himachal pradesh) to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/sujanpur-to-chandigarh> (<https://www.redbus.in/bus-tickets/sujanpur-to-chandigarh>)

Route Name: Chandigarh to Sujanpur (himachal pradesh)

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-sujanpur> (<https://www.redbus.in/bus-tickets/chandigarh-to-sujanpur>)

Route Name: Talwara to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/talwara-to-chandigarh> (<https://www.redbus.in/bus-tickets/talwara-to-chandigarh>)

Route Name: Vrindavan to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/vrindavan-to-chandigarh> (<https://www.redbus.in/bus-tickets/vrindavan-to-chandigarh>)

Route Name: Chandigarh to Shimla

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-shimla> (<https://www.redbus.in/bus-tickets/chandigarh-to-shimla>)

Route Name: Chandigarh to Dinanagar (punjab)

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-dinanagar-punjab> (<https://www.redbus.in/bus-tickets/chandigarh-to-dinanagar-punjab>)

Route Name: Chandigarh to Baijnath

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-baijnath> (<https://www.redbus.in/bus-tickets/chandigarh-to-baijnath>)

Clicking on page 3

Successfully navigated to page 3

Route Name: Dinanagar (punjab) to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/dinanagar-punjab-to-chandigarh> (<https://www.redbus.in/bus-tickets/dinanagar-punjab-to-chandigarh>)

Route Name: Chandigarh to Dharamshala (Himachal Pradesh)

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-dharamshala> (<https://www.redbus.in/bus-tickets/chandigarh-to-dharamshala>)

Route Name: Chandigarh to Talwara

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-talwara> (<https://www.redbus.in/bus-tickets/chandigarh-to-talwara>)

Route Name: Chandigarh to Amritsar

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-amritsar> (<https://www.redbus.in/bus-tickets/chandigarh-to-amritsar>)

Route Name: Chandigarh to Agra

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-agra> (<https://www.redbus.in/bus-tickets/chandigarh-to-agra>)

Route Name: Rohtak to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/rohtak-to-chandigarh> (<https://www.redbus.in/bus-tickets/rohtak-to-chandigarh>)

Route Name: Narnaul to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/narnaul-to-chandigarh> (<https://www.redbus.in/bus-tickets/narnaul-to-chandigarh>)

Route Name: Amritsar to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/amritsar-to-chandigarh> (<https://www.redbus.in/bus-tickets/amritsar-to-chandigarh>)

Route Name: Chandigarh to Haridwar

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-haridwar> (<https://www.redbus.in/bus-tickets/chandigarh-to-haridwar>)

Route Name: Hisar (Haryana) to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/hisar-haryana-to-chandigarh> (<https://www.redbus.in/bus-tickets/hisar-haryana-to-chandigarh>)

Clicking on page 4

Successfully navigated to page 4

Route Name: Dharamshala (Himachal Pradesh) to Chandigarh

Route Link: <https://www.redbus.in/bus-tickets/dharamshala-to-chandigarh>

igarh (<https://www.redbus.in/bus-tickets/dharamshala-to-chandigarh>)  
Route Name: Jawala Ji to Chandigarh  
Route Link: <https://www.redbus.in/bus-tickets/jawala-ji-to-chandigarh> (<https://www.redbus.in/bus-tickets/jawala-ji-to-chandigarh>)  
Route Name: Baijnath to Chandigarh  
Route Link: <https://www.redbus.in/bus-tickets/baijnath-to-chandigarh> (<https://www.redbus.in/bus-tickets/baijnath-to-chandigarh>)  
Route Name: Chandigarh to Rohtak  
Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-rohtak> (<https://www.redbus.in/bus-tickets/chandigarh-to-rohtak>)  
Route Name: Chandigarh to Hisar (Haryana)  
Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-hisar-haryana> (<https://www.redbus.in/bus-tickets/chandigarh-to-hisar-haryana>)  
Route Name: Chandigarh to Una (Himachal Pradesh)  
Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-una> (<https://www.redbus.in/bus-tickets/chandigarh-to-una>)  
Route Name: Chandigarh to Rishikesh  
Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-rishikesh> (<https://www.redbus.in/bus-tickets/chandigarh-to-rishikesh>)  
Route Name: Rishikesh to Chandigarh  
Route Link: <https://www.redbus.in/bus-tickets/rishikesh-to-chandigarh> (<https://www.redbus.in/bus-tickets/rishikesh-to-chandigarh>)  
Route Name: Shimla to Chandigarh  
Route Link: <https://www.redbus.in/bus-tickets/shimla-to-chandigarh> (<https://www.redbus.in/bus-tickets/shimla-to-chandigarh>)  
Route Name: Agra to Chandigarh  
Route Link: <https://www.redbus.in/bus-tickets/agra-to-chandigarh> (<https://www.redbus.in/bus-tickets/agra-to-chandigarh>)  
Clicking on page 5  
Successfully navigated to page 5  
Route Name: Haldwani to Chandigarh  
Route Link: <https://www.redbus.in/bus-tickets/haldwani-to-chandigarh> (<https://www.redbus.in/bus-tickets/haldwani-to-chandigarh>)  
Route Name: Jammu (j and k) to Chandigarh  
Route Link: <https://www.redbus.in/bus-tickets/jammu-to-chandigarh> (<https://www.redbus.in/bus-tickets/jammu-to-chandigarh>)  
Route Name: Chandigarh to Narnaul  
Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-narnaul> (<https://www.redbus.in/bus-tickets/chandigarh-to-narnaul>)  
Route Name: Chandigarh to Jawala Ji  
Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-jawala-ji> (<https://www.redbus.in/bus-tickets/chandigarh-to-jawala-ji>)  
Route Name: Chandigarh to Jammu (j and k)  
Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-jammu> (<https://www.redbus.in/bus-tickets/chandigarh-to-jammu>)  
Route Name: Firozpur to Chandigarh  
Route Link: <https://www.redbus.in/bus-tickets/ferozpur-to-chandigarh> (<https://www.redbus.in/bus-tickets/ferozpur-to-chandigarh>)  
Route Name: Hansi to Chandigarh  
Route Link: <https://www.redbus.in/bus-tickets/hansi-to-chandigarh> (<https://www.redbus.in/bus-tickets/hansi-to-chandigarh>)  
Route Name: Chandigarh to Haldwani  
Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-haldwani> (<https://www.redbus.in/bus-tickets/chandigarh-to-haldwani>)  
Route Name: Chandigarh to Firozpur

Route Link: <https://www.redbus.in/bus-tickets/chandigarh-to-ferozpur> (<https://www.redbus.in/bus-tickets/chandigarh-to-ferozpur>)

```
In [68]: df_cha = pd.DataFrame(cha_data)

df_cha.to_csv("/Users/jainivedhitha/Desktop/scraped_routes_cha.csv")

print(df_cha.head())
```

	Route Name \	Route Link
0	Yamuna Nagar to Chandigarh	<a href="https://www.redbus.in/bus-tickets/yamuna-nagar-to-chandigarh">https://www.redbus.in/bus-tickets/yamuna-nagar...</a> ( <a href="https://www.redbus.in/bus-tickets/yamuna-nagar-to-chandigarh">https://www.redbus.in/bus-tickets/yamuna-nagar...</a> )
1	Chandigarh to Delhi	<a href="https://www.redbus.in/bus-tickets/chandigarh-to-delhi">https://www.redbus.in/bus-tickets/chandigarh-t...</a> ( <a href="https://www.redbus.in/bus-tickets/chandigarh-to-delhi">https://www.redbus.in/bus-tickets/chandigarh-t...</a> )
2	Delhi to Chandigarh	<a href="https://www.redbus.in/bus-tickets/delhi-to-chandigarh">https://www.redbus.in/bus-tickets/delhi-to-cha...</a> ( <a href="https://www.redbus.in/bus-tickets/delhi-to-chandigarh">https://www.redbus.in/bus-tickets/delhi-to-cha...</a> )
3	Ludhiana to Chandigarh	<a href="https://www.redbus.in/bus-tickets/ludhiana-to-chandigarh">https://www.redbus.in/bus-tickets/ludhiana-to-...</a> ( <a href="https://www.redbus.in/bus-tickets/ludhiana-to-chandigarh">https://www.redbus.in/bus-tickets/ludhiana-to-...</a> )
4	Chandigarh to Yamuna Nagar	<a href="https://www.redbus.in/bus-tickets/chandigarh-to-yamuna-nagar">https://www.redbus.in/bus-tickets/chandigarh-t...</a> ( <a href="https://www.redbus.in/bus-tickets/chandigarh-to-yamuna-nagar">https://www.redbus.in/bus-tickets/chandigarh-t...</a> )

## BUS DETAILS

```
In [96]: import pandas as pd
import time
from selenium import webdriver
from selenium.webdriver.common.by import By
from selenium.webdriver.support.ui import WebDriverWait
from selenium.webdriver.chrome.service import Service # Import Ser
from selenium.webdriver.support import expected_conditions as EC
```

```
In [101]: def scrape_bus_details(state_csv, output_csv):
# Read the CSV file containing route names and links
df = pd.read_csv(state_csv)

driver = webdriver.Chrome() # Use Service to pass the path
wait = WebDriverWait(driver, 60)

# Lists to store bus details
Bus_names = []
Bus_types = []
Departing_time = []
Reaching_time = []
Durations = []
Ratings = []
```

```

Prices = []
Seats_Available = []
Route_names = []
Route_links = []

# Loop through each route link in the CSV
for index, row in df.iterrows():
    route_name = row["Route Name"]
    route_link = row["Route Link"]

    # Open the route link in the browser
    driver.get(route_link)
    time.sleep(2)

    # Scrape bus details using XPATH
    bus_name_elems = driver.find_elements(By.XPATH, "//div[@cla
    bus_type_elems = driver.find_elements(By.XPATH, "//div[@cla
    Departing_time_elems = driver.find_elements(By.XPATH, "//*[
    Reaching_time_elems = driver.find_elements(By.XPATH, "//*[

    # Use try-except for optional elements like ratings
    try:
        rating_elems = driver.find_elements(By.XPATH, "//div[@c
    except Exception as e:
        rating_elems = []

    duration_elems = driver.find_elements(By.XPATH, "//*[@class
    price_elems = driver.find_elements(By.XPATH, '//*[class="f
    seats_available_elems = driver.find_elements(By.XPATH, "//d

    # Append data to lists
    for i in range(len(bus_name_elems)):
        Bus_names.append(bus_name_elems[i].text if i < len(bus_
        Bus_types.append(bus_type_elems[i].text if i < len(bus_
        Departing_time.append(Departing_time_elems[i].text if i
        Reaching_time.append(Reaching_time_elems[i].text if i <
        Durations.append(duration_elems[i].text if i < len(dura
        Ratings.append(rating_elems[i].text if i < len(rating_e
        Prices.append(price_elems[i].text if i < len(price_elem
        Seats_Available.append(seats_available_elems[i].text if
        Route_names.append(route_name)
        Route_links.append(route_link)

    # Save scraped data to a CSV file
    data = {
        'Bus_name': Bus_names,
        'Bus_type': Bus_types,
        'Start_time': Departing_time,
        'End_time': Reaching_time,
        'Duration': Durations,
        'Ratings': Ratings,
        'Price': Prices,
        'Seats_Available': Seats_Available,
        'Route_name': Route_names,
        'Route_link': Route_links
    }
    df_buses = pd.DataFrame(data)

```

```
df_buses.to_csv(output_csv, index=False)

driver.quit()
```

```
In [102]: #Andhra
scrape_bus_details('scraped_routes_and.csv', 'and_bus_details.csv')
```

```
In [103]: df_and = pd.read_csv("and_bus_details.csv")
df_and.head()
```

```
Out[103]:
```

	Bus_name	Bus_type	Start_time	End_time	Duration	Ratings	Price	Seats_Available
0	Sri Vengamamba Bus Transport (SVBT)	A/C Seater / Sleeper (2+1)	21:40	06:15	08h 35m	4.5\n290	INR 415	14 Seats available
1	Kaveri Tours and Travels	Volvo Multi Axle A/C Sleeper I-Shift B11R (2+1)	21:30	05:45	08h 15m	4.3\n145	INR 4000	37 Seats available
2	V Kaveri Travels	Scania AC Multi Axle Sleeper (2+1)	21:30	05:45	08h 15m	4.1\n253	INR 940	15 Seats available
3	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN
4	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

```
In [104]: #kerala
scrape_bus_details('scraped_routes_ker.csv', 'ker_bus_details.csv')
```



```
In [105]: df_ker = pd.read_csv("ker_bus_details.csv")
df_ker.head()
```

```
Out[105]:
```

	Bus_name	Bus_type	Start_time	End_time	Duration	Ratings	Price	Seats_Available	F
0	MMK Travels	A/C Seater / Sleeper (2+1)	22:30	07:30	09h 00m	4.3\n516	INR 750	24 Seats available	
1	Kyros Connect	Bharat Benz A/C Semi Sleeper (2+2)	23:00	09:00	10h 00m	4.3\n350	INR 599	21 Seats available	
2	SAAM BUS	VE A/C Sleeper (2+1)	18:40	06:45	12h 05m	4.2\n196	INR 850	11 Seats available	
3	AdFAST LINE BUS	A/C Sleeper (2+1)	21:15	06:15	09h 00m	4.4\n11	2429	34 Seats available	
4	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	

```
In [106]: # Telangana
scrape_bus_details('scraped_routes_tel.csv', 'tel_bus_details.csv')
```

```
In [107]: df_tel = pd.read_csv("tel_bus_details.csv")
df_tel.head()
```

```
Out[107]:
```

	Bus_name	Bus_type	Start_time	End_time	Duration	Ratings	Price	Seats_Available	R
0	Sri KVR Travels	Non A/C Seater / Sleeper (2+1)	23:40	05:00	05h 20m	3.4\n11	INR 710	9 Seats available	
1	BSR Tours And Travels	NON A/C Seater (2+2)	23:40	06:00	06h 20m	4.2\n23	INR 560	9 Seats available	
2	Bharathi Tours & Travels	Non A/C Seater / Sleeper (2+1)	23:40	04:00	04h 20m	3.0\n9	INR 550	12 Seats available	
3	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	
4	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	

```
In [108]: # Kadamba
scrape_bus_details('scraped_routes_kad.csv', 'kad_bus_details.csv')
```

```
In [109]: df_kad = pd.read_csv("kad_bus_details.csv")
df_kad.head()
```

```
Out[109]:
```

	Bus_name	Bus_type	Start_time	End_time	Duration	Ratings	Price	Seats_Available
0	Kadamba Transport Corporation Limited (KTCL) -...	Non AC Seater 2+2	18:30	05:00	10h 30m	3.8\n123	INR 600	5 Seats available
1	Ashray Amrutyog	A/C Sleeper (2+1)	20:15	09:30	13h 15m	4.3\n559	INR 701	15 Seats available
2	IntrCity SmartBus	Bharat Benz A/C Sleeper (2+1)	21:15	08:45	11h 30m	4.4\n216	INR 600	17 Seats available
3	AdIntrCity SmartBus	NaN	19:30	08:05	12h 35m	4.2	INR 399	14 Seats available
4	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN

```
In [110]: # Rajasthan
scrape_bus_details('scraped_routes_raj.csv', 'raj_bus_details.csv')
```

```
In [111]: df_raj = pd.read_csv("raj_bus_details.csv")
df_raj.head()
```

```
Out[111]:
```

	Bus_name	Bus_type	Start_time	End_time	Duration	Ratings	Price	Seats_Available	F
0	M R Travels	Volvo Multi- Axle I- Shift B11R Semi Sleeper (2+2)	17:50	21:55	04h 05m	4.4\n418	INR 600	35 Seats available	
1	Raj Travel	A/C Sleeper (2+1)	22:30	05:30	07h 00m	4.4\n64	INR 560	14 Seats available	
2	Jain travels regd	A/C Seater / Sleeper (2+1)	22:15	04:30	06h 15m	4.0\n249	INR 460	20 Seats available	
3	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	
4	NaN	NaN	NaN	NaN	NaN	NaN	NaN	NaN	

```
In [112]: # South Bengal
scrape_bus_details('scraped_routes_sb.csv', 'sb_bus_details.csv')
```

```
In [113]: df_sb = pd.read_csv("sb_bus_details.csv")
df_sb.head()
```

```
Out[113]:
```

	Bus_name	Bus_type	Start_time	End_time	Duration	Ratings	Price	Seats_Available
0	Greenline (Karunamoyee)	Volvo A/C Seater (2+2)	17:40	21:20	03h 40m	3.9\n223	INR 486	6 Seats available
1	SHYAMOLI Pvt. Ltd. (Karunamoyee)	Volvo A/C Seater (2+2)	17:50	21:35	03h 45m	4.3\n307	INR 486	5 Seats available
2	Express Line	Volvo A/C Seater (2+2)	18:30	22:50	04h 20m	4.5\n292	INR 486	13 Seats available
3	SHYAMOLI Pvt. Ltd. (Karunamoyee)	Volvo Multi- Axle A/C Semi Sleeper (2+2)	17:45	20:00	02h 15m	4.5\n92	INR 429	33 Seats available
4	Greenline (Karunamoyee)	Volvo A/C Seater (2+2)	17:45	19:20	01h 35m	4.4\n31	INR 429	26 Seats available

```
In [114]: # Assam
scrape_bus_details('scraped_routes_ass.csv', 'ass_bus_details.csv')
```

```
In [115]: df_ass = pd.read_csv("ass_bus_details.csv")
df_ass.head()
```

```
Out[115]:
```

	Bus_name	Bus_type	Start_time	End_time	Duration	Ratings	Price	Seats_Available	R
0	BLUE HILL TRAVELS INDIA LIMITED	NON A/C Seater Semi Sleeper (2+1)	22:15	03:45	05h 30m	3.3\n26	450	9 Seats available	
1	Himalayan Travels	NON A/C Seater (2+2)	23:40	04:00	04h 20m	1.8\n16	450	29 Seats available	
2	Yatra Travels	NON A/C Seater (2+1)	18:00	23:30	05h 30m	3.7\n24	400	17 Seats available	
3	Yatra Travels	NON AC Seater/ Sleeper (2+1)	20:00	00:00	04h 00m	3.7\n32	400	15 Seats available	
4	Yatra Travels	NON AC Seater/ Sleeper (2+1)	20:30	01:00	04h 30m	3.8\n9	400	22 Seats available	

```
In [116]: # Himachal
scrape_bus_details('scraped_routes_him.csv', 'him_bus_details.csv')
```

```
In [117]: df_him = pd.read_csv("him_bus_details.csv")
          df_him.head()
```

[illegible]

```
In [118]: #Uttar Pradesh
scrape_bus_details('scraped_routes_utp.csv', 'utp_bus_details.csv')
```

```
In [119]: df_utm = pd.read_csv("utm_bus_details.csv")
df_utm.head()
```

[illegible]

```
In [120]: # West Bengal
scrape_bus_details('scraped_routes_wb.csv', 'wb_bus_details.csv')
```

```
In [121]: df_wb = pd.read_csv("wb_bus_details.csv")
df_wb.head()
```

```
Out[121]:
```

	Bus_name	Bus_type	Start_time	End_time	Duration	Ratings	Price	Seats_Available	R
0	Aradhana Travels	A/C Seater / Sleeper (2+2)	18:35	23:55	05h 20m	1.1\n10	475	19 Seats available	
1	Satya Paribahan	A/C Seater (2+3)	23:00	05:10	06h 10m	2.8\n32	INR 370	24 Seats available	
2	Aradhana Bus Service	A/C Seater / Sleeper (2+2)	23:00	04:30	05h 30m	2.1\n6	INR 550	62 Seats available	
3	Snemita Paribahan (Shinjini)	AC Seater (2+3)	23:35	05:00	05h 25m	2.4\n17	INR 370	2 Seats available	
4	Arunita Paribahan	A/C Seater (2+3)	23:35	05:00	05h 25m	2.9	INR 420	13 Seats available	

```
In [122]: # Chandigarh
scrape_bus_details('scraped_routes_cha.csv', 'cha_bus_details.csv')
```

```
In [123]: df_cha = pd.read_csv("cha_bus_details.csv")
df_cha.head()
```

Out[123]:

	Bus_name	Bus_type	Start_time	End_time	Duration	Ratings	Price	Seats_Available	R
0	Zimindara Travels	AC Sleeper (2+1)	20:30	22:30	02h 00m	4.0	INR 699	11 Seats available	
1	SHRI KRISHNA TRAVELS (JAI SHREE GANESH YATRA CO.)	VE A/C Seater / Sleeper (2+1)	20:40	23:30	02h 50m	3.7	INR 675	1 Seat available	
2	Vijay Tour and Travels	Bharat Benz A/C Seater /Sleeper (2+1)	17:55	23:40	05h 45m	3.5	INR 499	24 Seats available	
3	Khurana Bus Service	Bharat Benz A/C Seater (2+2)	18:00	22:30	04h 30m	3.1	INR 400	5 Seats available	
4	FlixBus	AC Seater (2+2)	18:05	23:05	05h 00m	4.1	INR 294	14 Seats available	

```
In [124]: all_df = [df_and,df_ker,df_tel,df_kad,df_raj,df_sb,df_him,df_ass,df...
```

```
In [125]: all_dfs = pd.concat(all_df,axis = 0,ignore_index = True)
```

```
In [126]: all_dfs.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1176 entries, 0 to 1175
Data columns (total 10 columns):
#   Column              Non-Null Count  Dtype
---  -
0   Bus_name            988 non-null    object
1   Bus_type            961 non-null    object
2   Start_time          988 non-null    object
3   End_time            988 non-null    object
4   Duration            988 non-null    object
5   Ratings             986 non-null    object
6   Price               980 non-null    object
7   Seats_Available     972 non-null    object
8   Route_name          1176 non-null   object
9   Route_link          1176 non-null   object
dtypes: object(10)
memory usage: 92.0+ KB
```

```
In [127]: all_dfs["Price"] = all_dfs["Price"].str.replace("INR","")
all_dfs["Price"] = all_dfs["Price"].astype(float)
all_dfs["Price"].fillna(0)
```

```
Out[127]: 0      415.0
1     4000.0
2      940.0
3         0.0
4         0.0
...
1171     666.0
1172    1124.0
1173     649.0
1174     749.0
1175     666.0
Name: Price, Length: 1176, dtype: float64
```

```
In [128]: #convert Ratings to numeric
all_dfs["Ratings"] = all_dfs["Ratings"].str.replace("New","")
all_dfs["Ratings"] = all_dfs["Ratings"].str.strip()
all_dfs["Ratings"] = all_dfs["Ratings"].str.split().str[0]
all_dfs["Ratings"] = pd.to_numeric(all_dfs["Ratings"], errors='coer')
all_dfs["Ratings"].fillna(0,inplace=True)
```

```
In [129]: # info after the data type change
all_dfs.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 1176 entries, 0 to 1175
Data columns (total 10 columns):
#   Column                Non-Null Count  Dtype
---  -
0   Bus_name              988 non-null    object
1   Bus_type              961 non-null    object
2   Start_time           988 non-null    object
3   End_time              988 non-null    object
4   Duration              988 non-null    object
5   Ratings              1176 non-null   float64
6   Price                 980 non-null    float64
7   Seats_Available      972 non-null    object
8   Route_name           1176 non-null    object
9   Route_link           1176 non-null    object
dtypes: float64(2), object(8)
memory usage: 92.0+ KB
```

```
In [131]: import numpy as np
import pandas as pd
```

```
In [132]: # replacing the nan value
all_dfs = all_dfs.replace({np.nan: None})
```

```
In [133]: # change dataframe to csv  
path=r"/Users/jainivedhitha/Desktop/all_df.csv"  
all_dfs.to_csv(path,index=False)
```

```
In [134]: data = pd.read_csv("all_df.csv")
```

```
In [ ]:
```