1. **Solving problems using array functions on rest countries data.**

**a.Get all the countries from Asia continent /region using Filter function:**

var request=new XMLHttpRequest();

request.open('GET','https://raw.githubusercontent.com/rvsp/restcountries-json-data/master/res-countries.json',true);

request.send();

request.onload=function (){

    var countryData=JSON.parse(this.response);

    const asia=countryData.filter((element)=>{

        if(element.region==='Asia'){

            return element.name;

        }

    })

    console.log(asia);

}

**Output:**

1. Array(50)
   1. **0**: {name: 'Afghanistan', topLevelDomain: Array(1), alpha2Code: 'AF', alpha3Code: 'AFG', callingCodes: Array(1), …}
   2. **1**: {name: 'Armenia', topLevelDomain: Array(1), alpha2Code: 'AM', alpha3Code: 'ARM', callingCodes: Array(1), …}
   3. **2**: {name: 'Azerbaijan', topLevelDomain: Array(1), alpha2Code: 'AZ', alpha3Code: 'AZE', callingCodes: Array(1), …}
   4. **3**: {name: 'Bahrain', topLevelDomain: Array(1), alpha2Code: 'BH', alpha3Code: 'BHR', callingCodes: Array(1), …}
   5. **4**: {name: 'Bangladesh', topLevelDomain: Array(1), alpha2Code: 'BD', alpha3Code: 'BGD', callingCodes: Array(1), …}
   6. **5**: {name: 'Bhutan', topLevelDomain: Array(1), alpha2Code: 'BT', alpha3Code: 'BTN', callingCodes: Array(1), …}
   7. **6**: {name: 'Brunei Darussalam', topLevelDomain: Array(1), alpha2Code: 'BN', alpha3Code: 'BRN', callingCodes: Array(1), …}
   8. **7**: {name: 'Cambodia', topLevelDomain: Array(1), alpha2Code: 'KH', alpha3Code: 'KHM', callingCodes: Array(1), …}
   9. **8**: {name: 'China', topLevelDomain: Array(1), alpha2Code: 'CN', alpha3Code: 'CHN', callingCodes: Array(1), …}
   10. **9**: {name: 'Georgia', topLevelDomain: Array(1), alpha2Code: 'GE', alpha3Code: 'GEO', callingCodes: Array(1), …}
   11. **10**: {name: 'Hong Kong', topLevelDomain: Array(1), alpha2Code: 'HK', alpha3Code: 'HKG', callingCodes: Array(1), …}

**b.Get all the countries with a population of less than 2 lakhs using Filter function:**

var request=new XMLHttpRequest();

request.open('GET','https://raw.githubusercontent.com/rvsp/restcountries-json-data/master/res-countries.json',true);

request.send();

request.onload=function(){

    var countryData=JSON.parse(this.response);

    const popu=countryData.filter((element)=>{

        return element.population<200000;

    })

    console.log(popu);

}

**Output:**

1. Array(63)
   1. **0**: {name: 'Åland Islands', topLevelDomain: Array(1), alpha2Code: 'AX', alpha3Code: 'ALA', callingCodes: Array(1), …}
   2. **1**: {name: 'American Samoa', topLevelDomain: Array(1), alpha2Code: 'AS', alpha3Code: 'ASM', callingCodes: Array(1), …}
   3. **2**: {name: 'Andorra', topLevelDomain: Array(1), alpha2Code: 'AD', alpha3Code: 'AND', callingCodes: Array(1), …}
   4. **3**: {name: 'Anguilla', topLevelDomain: Array(1), alpha2Code: 'AI', alpha3Code: 'AIA', callingCodes: Array(1), …}
   5. **4**: {name: 'Antarctica', topLevelDomain: Array(1), alpha2Code: 'AQ', alpha3Code: 'ATA', callingCodes: Array(1), …}
   6. **5**: {name: 'Antigua and Barbuda', topLevelDomain: Array(1), alpha2Code: 'AG', alpha3Code: 'ATG', callingCodes: Array(1), …}
   7. **6**: {name: 'Aruba', topLevelDomain: Array(1), alpha2Code: 'AW', alpha3Code: 'ABW', callingCodes: Array(1), …}
   8. **7**: {name: 'Bermuda', topLevelDomain: Array(1), alpha2Code: 'BM', alpha3Code: 'BMU', callingCodes: Array(1), …}
   9. **8**: {name: 'Bonaire, Sint Eustatius and Saba', topLevelDomain: Array(2), alpha2Code: 'BQ', alpha3Code: 'BES', callingCodes: Array(1), …}
   10. **9**: {name: 'Bouvet Island', topLevelDomain: Array(1), alpha2Code: 'BV', alpha3Code: 'BVT', callingCodes: Array(1), …}
   11. **10**: {name: 'British Indian Ocean Territory', topLevelDomain: Array(1), alpha2Code: 'IO', alpha3Code: 'IOT', callingCodes: Array(1), …}

**c.Print the following details name, capital, flag using forEach function:**

var request=new XMLHttpRequest();

request.open('GET','https://raw.githubusercontent.com/rvsp/restcountries-json-data/master/res-countries.json',true);

request.send();

request.onload=function(){

    var countryData=JSON.parse(this.response);

    countryData.forEach((element)=>{

        console.log(element.name,element.capital,element.flag);

    })

}

**Output:**

Live reload enabled.

sample1.js:31 Afghanistan Kabul https://restcountries.eu/data/afg.svg

sample1.js:31 Åland Islands Mariehamn https://restcountries.eu/data/ala.svg

sample1.js:31 Albania Tirana https://restcountries.eu/data/alb.svg

sample1.js:31 Algeria Algiers https://restcountries.eu/data/dza.svg

sample1.js:31 American Samoa Pago Pago https://restcountries.eu/data/asm.svg

sample1.js:31 Andorra Andorra la Vella https://restcountries.eu/data/and.svg

sample1.js:31 Angola Luanda https://restcountries.eu/data/ago.svg

sample1.js:31 Anguilla The Valley https://restcountries.eu/data/aia.svg

sample1.js:31 Antarctica https://restcountries.eu/data/ata.svg

sample1.js:31 Antigua and Barbuda Saint John's https://restcountries.eu/data/atg.svg

sample1.js:31 Argentina Buenos Aires https://restcountries.eu/data/arg.svg

sample1.js:31 Armenia Yerevan https://restcountries.eu/data/arm.svg

sample1.js:31 Aruba Oranjestad <https://restcountries.eu/data/abw.svg>

**d.Print the total population of countries using reduce function:**

var request=new XMLHttpRequest();

request.open('GET','https://raw.githubusercontent.com/rvsp/restcountries-json-data/master/res-countries.json',true);

request.send();

request.onload=function (){

    var countryData=JSON.parse(this.response);

    const population=countryData.reduce((acc,element)=>{

        return acc+element.population;

    },0)

    console.log(population);}

**output:**

Live reload enabled.

sample1.js:43 7349137231

**e. Print the country which uses US Dollars as currency:**

 var request = new XMLHttpRequest();

    request.open('Get', 'https://raw.githubusercontent.com/rvsp/restcountries-json-data/master/res-countries.json',true)

    request.send();

    request.onload = function () {

            var data = JSON.parse(this.response);

            var cur=[];

            for(i=0;i<data.length;i++){

                if(data[i].currencies[0].code==="USD")

                {

                    console.log("name:",data[i].name,"==>",data[i].currencies[0].code)

                }

            }

        }

**Output:**

Live reload enabled.

sample1.js:54 name: American Samoa ==> USD

sample1.js:54 name: Bonaire, Sint Eustatius and Saba ==> USD

sample1.js:54 name: British Indian Ocean Territory ==> USD

sample1.js:54 name: United States Minor Outlying Islands ==> USD

sample1.js:54 name: Virgin Islands (U.S.) ==> USD

sample1.js:54 name: Ecuador ==> USD

sample1.js:54 name: El Salvador ==> USD

sample1.js:54 name: Guam ==> USD

sample1.js:54 name: Marshall Islands ==> USD

sample1.js:54 name: Northern Mariana Islands ==> USD

sample1.js:54 name: Puerto Rico ==> USD

sample1.js:54 name: Timor-Leste ==> USD

sample1.js:54 name: Turks and Caicos Islands ==> USD

sample1.js:54 name: United States of America ==> USD