

1. For the given JSON iterate over all for loops (for, for in, for of, forEach)

```
var a =
  [{
    "fruit": "Apple",
    "size": "Large",
    "color": "Red"
  },
  {
    "fruit": "Orange",
    "size": "Large",
    "color": "Orange"
  },
  {
    "fruit": "Grapes",
    "size": "Small",
    "color": "Black"
  },
  {
    "fruit": "Cherry",
    "size": "Small",
    "color": "red"
  }
];
```

a. Iterate over for loop

```
for(i=0;i<a.length;i++)
{
  console.log(a[i].color);
}
```

Output: "Red"

"Orange"

"Black"

"red"

b. Iterate over for in loop

```
for( x in a){
  console.log(a[x].fruit);
}
```

Output: "Apple"

"Orange"

"Grapes"

"Cherry"

c. Iterate over for of loop

JSON files are not iterable . Hence for of loop cannot be used for JSON. But since we use array to enclose the JSON file, we could iterate as if it is an array.

```
for(x of a)
{
  console.log(x.color);
}
```

Output : "Red"

"Orange"

"Black"

"red"