```
function Set() {
  this.values = [];
  this.numberOfValues = 0;
}

Set.prototype.add = function(value) {
  if(!~this.values.indexOf(value)) {
    this.values.push(value);
    this.numberOfValues++;
  }
};
Set.prototype.remove = function(value) {
  var index = this.values.indexOf(value);
  if(~index) {
    this.values.splice(index, 1);
    this.numberOfValues--;
  }
};
Set.prototype.contains = function(value) {
  return this.values.indexOf(value) !== -1;
};
Set.prototype.union = function(set) {
  var newSet = new Set();
  set.values.forEach(function(value) {
    newSet.add(value);
  });
  this.values.forEach(function(value) {
    newSet.add(value);
  });
  return newSet;
};
Set.prototype.intersect = function(set) {
  var newSet = new Set();
  this.values.forEach(function(value) {
    if(set.contains(value)) {
      newSet.add(value);
    }
  });
  return newSet;
};
Set.prototype.difference = function(set) {
  var newSet = new Set();
  this.values.forEach(function(value) {
    if(!set.contains(value)) {
      newSet.add(value);
    }
  });
  return newSet;
};
Set.prototype.isSubset = function(set) {
  return set.values.every(function(value) {
    return this.contains(value);
  }, this);
};
Set.prototype.length = function() {
  return this.numberOfValues;
};
Set.prototype.print = function() {
  console.log(this.values.join(' '));
};
```

```
61
62 var set = new Set();
63 set.add(1);
64 set.add(2);
65 set.add(3);
66 set.add(4);
67 set.print(); // => 1 2 3 4
68 set.remove(3);
69 set.print(); // => 1 2 4
70 console.log('contains 4 is true:', set.contains(4)); // => true
71 console.log('contains 3 is false:', set.contains(3)); // => false
72 console.log('---');
73 var set1 = new Set();
74 set1.add(1);
75 set1.add(2);
76 var set2 = new Set();
77 set2.add(2);
78 set2.add(3);
79 var set3 = set2.union(set1);
80 set3.print(); // => 1 2 3
81 var set4 = set2.intersect(set1);
82 set4.print(); // => 2
83 var set5 = set.difference(set3); // 1 2 4 diff 1 2 3
84 set5.print(); // => 4
85 var set6 = set3.difference(set); // 1 2 3 diff 1 2 4
86 set6.print(); // => 3
87 console.log('set1 subset of set is true:', set.isSubset(set1)); // => true
88 console.log('set2 subset of set is false:', set.isSubset(set2)); // => false
89 console.log('set1 length gives 2:', set1.length()); // => 2
90 console.log('set3 length gives 3:', set3.length()); // => 3
91
```