Challenge 3

1)
```
var numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
var sum = 0;
for (let i = 0; i < numbers.length; i++) {
    var b = numbers[i];
    sum += b;
}
console.log(sum);
```

2)
```
var numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10];
var max = numbers[0]
for (let i = 1; i < numbers.length; i++) {
    var value = numbers[i];
    if (max < value){
        max = value;
    }
}
console.log(max);
```

3)
```
var array = ["apple", "banana", "cherry", "date","dog","cat","wood"];
var reverse = [];
for (let i = array.length - 1, j = 0; i >= 0; i--, j++) {
    reverse[j] = array[i];
}
console.log(reverse);
```

4)var numbers = [12, 45, 7, 21, 9, 33, 56, 4, 18, 63];

```
var a = 0;
for (let i=0;i<numbers.length;i++){
    var b = numbers[i];
    a += b;
}
console.log(a/numbers.length);
```

5)var numbers = [12, 45, 7, 21, 9, 33, 56, 4, 18, 63];

```
var b = [];
var j = 0;
for (let i = 0; i < numbers.length; i++) {
  if (numbers[i] % 2 == 1) {
    b[j] = numbers[i];
    j++;
  }
}
console.log(b);
```

6)function sortArray(a) {

```
  var n = a.length;
  for (var i = 0; i < n - 1; i++) {
    for (var j = 0; j < n - i - 1; j++) {
      if (a[j] > a[j + 1]) {
        var temp = a[j];
        a[j] = a[j + 1];
```

```
      a[j + 1] = temp;
    }
   }
  }
  return a;
}
var array = ["apple", "date", "cherry","banana","goat","zebra","hyna"];
var sortedArray = sortArray(array);
console.log(sortedArray);

7)var numbers = [12, 45, 7, 21, 9, 33, 56, 4, 18, 63];
var b = [];
var j = 0;
for (let i = 0; i < numbers.length; i++) {
   b[j] = numbers[i]*2;
   j++;
}
console.log(b);

8)var numbers = [12, 45, 7, 21, 9, 33, 56, 4, 18, 63];
var b = [];
var j = 0;
for (let i = numbers.length-1; i >= 0; i--) {
   b[j] = numbers[i];
   j++;
}
```

```
console.log(b);
```

9)
```
function total(a) {
  var total = 0;
  for (var i = 0; i < a.length; i++) {
    total += a[i].length;
  }
  return total;
}
var array = ["apple", "date", "cherry","banana","goat","zebra","hyna"];
var characters = total(array);
console.log("Total characters:", characters);
```

10)
```
function greater10(a) {
    var b = [];
    var j=0;
  for (var i = 0; i < a.length; i++) {
    if(a[i]>10){
        b[j] = a[i];
        j++;
    }
  }
  return b;
}
var numbers = [12, 45, 7, 21, 9, 33, 56, 4, 18, 63];
var max = greater10(numbers);
console.log(max);
```