

Sample midterm 1 key

1. a)

kkk
mmm
ooo

b)

kkk	
hhh	ooo mmm
ddd	
^..^	

2.

```
div {
    margin: 5px;
}

#gallery > img {
    width: 60px;
    height: 60px;
    margin: 10px;
}

#gallery {
    width: 20%;
}

p {
    background-color: yellow;
    padding: 20px;
}

#bigPic {
    width: 75%;
}

#bigPic > div {
    clear: left;
    border: none;
}

#gallery, #bigPic {
    float: left;
}

#more {
    clear: left;
}

#contentArea {
    width: 90%;
    margin-left: auto;
    margin-right: auto;
    background-color: white;
}

body {
    background-color: gray;
}

h3 {
    text-align: right;
}

div, h3 {
    border: 2px black solid;
}
```

3. JavaScript / DOM

```
window.onload = function() {
    document.getElementById("find").onclick = findClick;
};

function findClick() {
    document.getElementById("palindromes").innerHTML = "";
    var words = document.getElementById("phrase").value.split(" ");
    var count = 0;
    for (var i = 0; i < words.length; i++) {
        if (document.getElementById("min").value &&
            words[i].length < document.getElementById("min").value) { continue;
        }

        if (document.getElementById("max").value &&
            words[i].length > document.getElementById("max").value) { continue;
        }

        if (isPalindrome(words[i])) {
            var li = document.createElement("li");
            li.innerHTML = words[i];
            if (count % 2 == 0) {
                li.style.backgroundColor = "#cccccc";
            }
            document.getElementById("palindromes").appendChild(li);
            count++;
        }
    }
    document.getElementById("count").innerHTML = count + " total
palindrome(s).";
}

function isPalindrome(s) {
    s = s.toLowerCase();
    for (var i = 0; i < s.length / 2; i++) {
        if (s[i] != s[s.length - 1 - i]) { return false; }
    }
    return true;
}
```