



The following is in the body of some responsive HTML annotated with line numbers that is using bootstrap. You will modify this code to accomplish the given tasks for question 2.

```
01:<form>
02:  <label for="form1_size">Size is: </label>
03:  <input type="number" id="form1_size" name="form1_size"> <br>
04:  <label for="form1_word">Word is: </label>
05:  <input type="text" id="form1_word" name="form1_word">
06:  <label for="form1_cost">Cost is: </label>
07:  <input type="number" id="form1_cost" name="form1_cost">
08:</form>
```

```
09:<div class="container-fluid">
10:  <h1 id="fred">Responsive Design</h1>
11:  <p id="wilma">Resize the browser window</p>
12:  <p id="betty">To see the effect</p>
13:  <div class="row" id="bit">
14:    <div class="col-sm-2" id="one">ALF </div>
15:    <div class="col-sm-2" id="two">BOGO</div>
16:    <div class="col-sm-2" id="three">GPU</div>
17:    <div class="col-sm-2" id="four">DOD </div>
18:</div>
19:<button type="button" class="btn btn-success">Opt1</button>
20:<button type="button" class="btn btn-warning">Opt2</button>
```

```
function processRepeat(){
  let word = document.getElementById('form1_word').value
  word += document.getElementById('fred').innerHTML
  document.getElementById('two').innerHTML=word
}
```

**Question 2 (10 points)**

*Task 1 (2 points):* Modify the size input so that it has a default value of 32. Give the line number of the HTML you are changing and what you are changing the line to.

Line #: 3

Modified to: `<input type='number' ... value=32>`

*Task 2 (6 points):* Create a Javascript function named `processRepeat` that will get the value of the word in the form, concatenate it with the contents of the `h1` element, and replace the contents of the `div` containing `BOGO` with the result. Write the Javascript and appropriate HTML tags below line 20 on the previous page.

*Task 3 (2 points):* Modify the HTML so pressing the `Opt1` button will call the function you wrote in task 2. Give the line number of the HTML you are changing and what you are changing the line to.

Line #: 20

Modified to: `<button ... onclick='processRepeat()'>Opt1</button>`

**Question 3A (6 points)** Write a Javascript function (no HTML needed) that takes an array of numbers, creates an Object that contains the sum of the squares of the numbers and the largest number in the array (choose appropriate keys to use for these values), and returns the object.

```
function (vals) { // no name needed, but can provide one
  let sumsquares = 0
  let maxval = vals[0]
  for val of vals {
    sumsquares += val*val
    if (val > maxval) minval = val;
  }
  return {'sum_of_squares': sumsquares, 'max': maxval}
}
```

**Question 3B (4 points)** Given the following Javascript

```
function foo (somenumbers) {
  bar = 0
  for (num of somenumbers) {
    if (num % 2 == 0) bar += num
    else bar -= num
  }
  setTimeout(()=>alert(`Result is ${bar}`), 3000)
}
```

What happens when `foo([1,2,3,4,5,6])` is called? Specifically what is the output and when/how is it displayed to the user?

3 is displayed in the alert text 3 seconds after the function is called

# Midterm 2

You are allowed to use your single page of hand written notes as a reference.

## 1 2 points Free Question

The basic table styling can be done using which class?

- ☒ table
- ☐ table container
- ☐ tbl
- ☐ style table

## 2 2 points

If we have a variable which has reference for a div  
let goDiv = document.getElementById("display")  
how can we register a callback function to respond to a click event?

- ☐ Not possible since div elements don't respond to clicks
- ☐ clickEvent(goDiv, functiontocall)
- ☒ goDiv.onclick = functiontocall
- ☐ goDiv.set("functiontocall")

## 3 2 points

How are unordered lists styled with Bootstrap?

- ☐ using a class of list-group in a <ol> tag
- ☒ using a class of list-group in a <ul> tag
- ☐ using an id of list-group in a <ul> tag
- ☐ none of the above

4 2 points

Given the definition

**let object = {x:10, y:20}**

What is the result if we ask for the value of z?

- ☐ An exception is thrown
- ☐ We get the value 10
- ☐ We get the number 0
- ☒ We get the value undefined

5 2 points

Which of the following is NOT an example of a Java Script object?

- ☒ {}
- ☐ {}
- ☐ {name:"Kitty"}
- ☐ {id:5, position:"top"}