

**Master Copy**  
**ACC Software Bootcamp - Week 12 Review**  
**Part 1 - Concepts Review (60% weightage)**  
Tuesday, Jan 8, 2019

**INSTRUCTIONS (please read carefully):**

- Make a copy of this document, affix your name and write your answers within that document. After you are done, please share a link to your doc back to the instructors. Your document and links/attachments will solely be considered for evaluating your preparation.
- This test is open book. You may use all resources available to you, including discussions among your peers. Please keep the discussion on Slack, so others do not get distracted. Only use **virtualclassroom** channel. Share tips, links, advice, but **not** answers and/or code.
- If a code snippet on the review has a bug, please feel free to fix it and then answer. There is at least one known bug in sample code below.
- To make sure you have enough time for all questions, return to the difficult ones later. Do not get stuck on them.
- When providing code to us for grading, we prefer online prototyping environments like codepen or jsbin. Copy paste of code is fine as well.
- If you have any questions for the instructors, please ask on the **virtualclassroom** channel as well.

**EVALUATION CRITERIA:**

- Evidence of understanding of the underlying concepts related to the question (50% weightage). Can you answer the "why?" where asked? Your answer should be within a sentence or two. Please no essay type answers.
- How complete is your answer and/or your code (25% weightage). Code is complete if it can handle all possible inputs, e.g. user error.
- Does your code work, where applicable? (25% weightage).

Your name: \_\_\_\_\_

## QUESTIONS:

1. In a HTML document, can a single anchor tag point to two different web pages? If yes, please provide working examples. If not, please explain why not.

2. Consider the following code snippet:

```
var myvar = {this:1,that:2,nothing:['one','two','three']};
```

What would be the value of the following:

```
myvar.that  
myvar['this']  
myvar.nothing[1]  
myvar['nothing']
```

3. What do the following CSS selectors select? For bonus points, please provide an example via a Plunker, jsbin or CodePen (come back to this after you have attempted other questions).
  - `div + p`
  - `div p`
  - `div, p`
  - `div > p`
  - `div ~ p`
4. Let's say you are scraping a website. How would you select every anchor tag that points to a page on nytimes.com? Please explain how this selector works.
5. What would be the output of the following code snippet. Correct the code if necessary.

```

console.log(
  (function fn(n){
    return (
      n > 2 : n*fn(n-1) ? n-2
    )
  })(5))
)

```

6. What would the following code return and why? Credit only given for the explanation.

```

(function(){
  var rab = rim = 56;
})();

console.log("rab defined? " + (typeof rab !== 'undefined'));
console.log("rim defined? " + (typeof rim !== 'undefined'));

```

7. What would the following code return and why?

```

for (var i = 0; i < 5; i++) {
  setTimeout(function() { console.log(i); }, i * 0 );
}

```

8. Consider the following object. You need to make a copy of this object.

```

const dog1 = {
  name: 'Theo',
  age: 4
}

```

If you used `var dog2 = dog1`, would you be able to change the name of `dog1` but not of `dog2`? Why (50%)?

How would you create a true copy of the object, which is distinct from `dog1` (50%)?

9. Consider the following code

```

console.log("0 || 1 = " + (0 || 1));
console.log("1 || 2 = " + (1 || 2));

```

```
console.log("0 && 1 = "+(0 && 1));
console.log("1 && 2 = "+(1 && 2));
```

Please execute and explain why you are getting these results within 100 words.

10. Write a Query that returns data from the LEADS and REMARKS tables below such that
  - a. All leads are returned, even if there are no remarks for that lead.
  - b. List LEAD\_ID.
  - c. List FULLNAME (First and Last Name separated by a space).
  - d. If the LEAD\_ACTIVE = 'Y', return the text "Lead is Active". (Hint: you may use CASE). Else, return the text "Lead is Unknown".
  - e. REMARKS from REM\_DESC column (display only the first 100 characters, hint: use SubString function)

#### LEAD TABLE:

Column Name	ID	Pk	Null?	Data Type	Default
LEAD_ID	1	1	N	NUMBER (12)	
SMR_GLOBAL_NAME	2		Y	VARCHAR2 (60 Byte)	
SMR_TIME_STAMP	3		Y	DATE	
LEAD_TYPE	4		N	VARCHAR2 (3 Byte)	'RG'
RECEIVE_MAIL_IND	5		N	VARCHAR2 (1 Byte)	'Y'
LAST_NAME1	6		N	VARCHAR2 (60 Byte)	
HOMEOWNER	7		N	VARCHAR2 (1 Byte)	'U'
CREDIT_FLAG	8		N	VARCHAR2 (1 Byte)	'U'
DATE_CREATED	9		N	DATE	
CREATED_BY	10		N	VARCHAR2 (30 Byte)	
LEAD_ACTIVE	11		N	VARCHAR2 (1 Byte)	'Y'

#### REMARKS TABLE:

Column Name	ID	Pk	Null?	Data Type
REM_ID	1	1	N	NUMBER (12)
REMTYPE_ID	2		N	NUMBER (12)
REMAREA_ID	3		N	NUMBER (12)
LEAD_ID	4		N	NUMBER (12)
PERSONNEL_ID	5		N	NUMBER (12)
DATE_TIME_CREATED	6		N	DATE
RESV_NUM	7		Y	NUMBER (12)
CONTR_NUM	8		Y	NUMBER (12)
MBR_CONTR_ID	9		Y	NUMBER (12)
TOUR_ID	10		Y	NUMBER (12)
REM_DESC	11		N	VARCHAR2 (2000 Byte)

To test your query, you may connect to the same PG database we were using in class using Visual Studio Code. Both tables are available on this

database with the data loaded. In case you do not have it, here are the connection details:

Host: `pgdb.accsoftwarebootcamp.com`  
Port: `4321`  
Database: `accsoftwarebootcamp`  
User: `acc`  
password: `accrocks`

## **ACC Software Bootcamp - Week 12 Review**

### **Part 2 - Practical (40% weightage)**

#### **Mid Term Exam Project**

Choose one of the projects below and complete. Commit your code to your github repo or just paste it here.

#### **ALTERNATIVE 1 (BOOTSTRAP PROJECT)**

Please write, test and copy here code that would create a navigation bar and pin it to the top of the viewport (it should not move as you scroll down the page). Add two buttons within it for Login and Sign Up. You may or may not use bootstrap.

#### **ALTERNATIVE 2 (NODE EJS PROJECT)**

This project is designed to test your knowledge of the front end as well as the back end. You will be building an application that allows users to find current movies playing in the theaters.

The home page should look like this: <https://i.imgtc.com/uozLrjJ.png>

When they click on the button, they are taken to a page that looks like this (note that the movies listed may be different from you have):

<https://i.imgtc.com/ppTDATd.png>

When the user clicks on the button on the home page, they are taken to another page which lists four things: the movie title, overview, rating, and poster image.

You will be using the The Movie Database API. This is NOT the same API as from the practice project, but it is similar. It can be found here:

<https://developers.themoviedb.org/3>. Please note that a user key is required to read the data. It is free to sign up.

Read over the documentation and familiarize yourself with how to use it.  
Remember, you want to list the movies that are 'now playing' in theaters.