

PRE-INTERVIEW ASSIGNMENT

This is a pre-interview assignment which aims to evaluate the basic understanding of HTML/CSS, SQL and Logic.

General Notes and Rules:

- Assignment is meant to be completed by you (the applying candidate) without assistance from other people, should any plagiarism be identified, you will be disqualified immediately
- Usage of google, documentation, books, tutorials...etc. is allowed
- Concepts and solutions implemented as answers should be well understood, and will be asked about in follow up interviews
- Estimated duration for completion is about 60 min
- You can use any programming language you like to complete the logic question, syntax is not important but the logic should be clear and consistent. You have the option of using Pseudocode should you prefer.
- Once completed, submit the answers as text files in individual files labeled as follows: FULLNAME-QuestionNumber.txt, for example if your name is Mohammad Ahmad, you are required to submit 3 files: MohammadAhmad-Q1.txt, MohammadAhmad-Q2.txt and MohammadAhmad-Q3.txt

QUESTION 1 – SQL

Given SQL Tables below:

Table Name: Products	
ProductID	ProductName
1	Apple
2	Banana
3	Cucumber
4	Watermelon
5	Ice-cream
6	Orange
7	Eggplant
8	Egg

Table Name: ProductsPrice	
ProductID	ProductPrice
1	10.0
2	2.1
3	5.5
4	20.0
5	0.5
6	0.8
7	2.0
8	40.0

Write SQL Queries to get the following:

1. Count number of products
2. Get least expensive product name and price
3. Count number of products with price less than 5

QUESTION 2 – LOGIC

Given an array of products

["Apple", "Banana", "Cucumber", "Watermelon", "Ice-cream", "Orange", "Eggplant", "Egg"]

Write functions that:

1. Takes an array as parameter and prints out all products starting with any of these letters (A,E,I,O,U)
2. Takes an array as parameter and prints out all products with names longer than 5 characters

QUESTION 3 – HTML & CSS

The image shows a login form with a blue header bar at the top. Below the header is a large white area. In the center of this area is a login form consisting of two input fields: 'Username' and 'Password'. Below these fields is a red 'Login' button. At the bottom of the page is a grey footer bar.

Write the HTML & CSS code to create a page like the picture above containing:

1. Blue Header
2. Grey Footer (double the size of the header)
3. Centered area with Username, and Password inputs
4. Right aligned login button
5. Design should be responsive (resize properly on smaller screens)
6. Design should match the reference image as closely as possible