bxp Software

Full Stack Developer Exam



Candidate : Harsha Venkata Sai Chundru

Exam Version : 2-0

Required By : Chris Thomson

# Instructions

Please submit you scripts in a single zip file separated, the contents of the single zip file should be 5 separate files, one for each question. All outputs should be in HTML format.

Please submit your file to: [support@bxpsoftware.com](mailto:support@bxpsoftware.com)

# MySQL Connection String Assumptions

|  |  |
| --- | --- |
| DB Schema Name | bxp\_at\_home |
| Connection Username | BXP\_At\_Home\_Name |
| Connection Password | BXP\_At\_Home\_Key |
| Db Location | 127.0.0.1 |

## John Wick the bogeyman

Write a JavaScript function that prints all integer values from 1 to 100. For multiples of three output "John" instead of the value and for the multiples of five output "Wick". Values which are multiples of both three and five should output as “bogeyman ".

## 500 Element Array

Write a JavaScript function to generate a random array of 500 integers (values of 1 – 500 inclusive). Randomly remove and discard an arbitrary element from this newly generated array. Write the code to efficiently determine the value of the missing element. Explain your reasoning with comments.

## Database Connectivity

Demonstrate with PHP/Classic ASP/ASP.NET, how you would connect to a MySQL (InnoDB) database and query for all records with the following fields: (name, age, job\_title) from a table called 'bxp\_test'. Also provide an example of how you would write a sanitised record to the same table.

## Date Calculation

The Irish National Lottery draw takes place twice weekly on a Wednesday and a Saturday at 8pm. Write a JavaScript function that calculates and returns the next valid draw date based on the current date and time AND also on an optionally supplied date and time.

## A/B Testing

bxp would like to A/B test a number of promotional designs to see which provides the best conversion rate. Write a snippet of PHP/Classic ASP/ASP.NET code that redirects end users to the different designs based on the database table below. Extend the database model as needed. i.e. - 50% of people will be shown Design A, 25% shown Design B and 25% shown Design C. The code needs to be scalable as a single promotion may have upwards of 3 designs to test.

