



Candidate Exercise - PHP Developer

1. Prime Numbers

Write a PHP script that prints all integer values from 1 to 100.

Beside each number, print the numbers it is a multiple of (inside brackets and comma-separated). If only multiple of itself then print "[PRIME]".

2. ASCII Array

Write a PHP script to generate a random array containing all the ASCII characters from comma (",") to pipe ("|"). Then randomly remove and discard an arbitrary element from this newly generated array.

Write the code to efficiently determine the missing character.

3. TV Series

Populate a MySQL (InnoDB) database with data from at least 3 TV Series using the following structure:

```
tv_series -> (id, title, channel, gender);  
tv_series_intervals -> (id_tv_series, week_day, show_time);  
* Provide the SQL scripts that create and populate the DB;
```

Using OOP, write a code that tells when the next TV Series will air based on the current time-date or an inputted time-date, and that can be optionally filtered by TV Series title.

4. A/B Testing

Exads would like to A/B test some promotional designs to see which provides the best conversion rate. Write a snippet of PHP code that redirects end users to the different designs based on the data provided by this library: packagist.org/exads/ab-test-data

The data will be structured as follows:

```
"promotion" => [  
  "id" => 1,  
  "name" => "main",  
  "designs" => [  
    [ "designId" => 1, "designName" => "Design 1", "splitPercent" => 50 ],  
    [ "designId" => 2, "designName" => "Design 2", "splitPercent" => 25 ],  
    [ "designId" => 3, "designName" => "Design 3", "splitPercent" => 25 ],  
  ]  
]
```

The code needs to be object-oriented and scalable. The number of designs per promotion may vary.