Review Coding Questions – Part 1

1. Write a PHP function `sumOfEvenNumbers` that takes an integer `n` and returns the sum of all even numbers from 1 to `n`.
2. Write a PHP function `printAssociativeArray` that takes an associative array and prints each key-value pair in the format `key: value`.
3. Create a PHP function `greet` that takes a name and an optional greeting message. If the greeting message is not provided, it should default to "Hello".
4. Write a PHP function `calculateAreaR` that calculates the area of a rectangle. The function should take two arguments: the length and the width of the rectangle, and return the area.
5. Write a PHP function `calculateAreaC` that calculates the area of a circle. The function should take one argument: the radius, and return the area.
6. Write a PHP function `findMax` that takes an array of numbers and returns the largest number. Use a `foreach` loop to achieve this. DO NOT sort the array!
7. What will be the output of the following PHP code?

```
for ($i = 0; $i < 3; $i++) {

   for ($j = 0; $j < 2; $j++) {

      echo "($i, $j) ";

   }

}
```

8. What will be the output of the following PHP code?

```
$x = 10;

while ($x > 0) {

   echo "$x ";

   $x -= 3;

}
```

9. What will be the output of the following PHP code?

```
$y = 1;

do {

   echo $y . " ";

   $y *= 2;

} while ($y < 10);
```

10. What will be the output of the following PHP code?

```
for ($i = 0; $i < 5; $i++) {
```

```php
    if ($i == 3) {

        break;

    }

    echo "$i ";

}
```

11. What will be the output of the following PHP code?

```php
for ($i = 0; $i < 5; $i++) {

    if ($i == 2) {

        continue;

    }

    echo "$i ";

}
```

12. What will be the output of the following PHP code?

```php
$colors = array("red", "green", "blue");

foreach ($colors as $color) {

    echo "$color ";

}


}
```

13. What will be the output of the following PHP code?

```php
function counter() {

    static $count = 0;

    $count++;

    return $count;

}

echo counter();

echo counter();

echo counter();
```