If...Else Exercises php
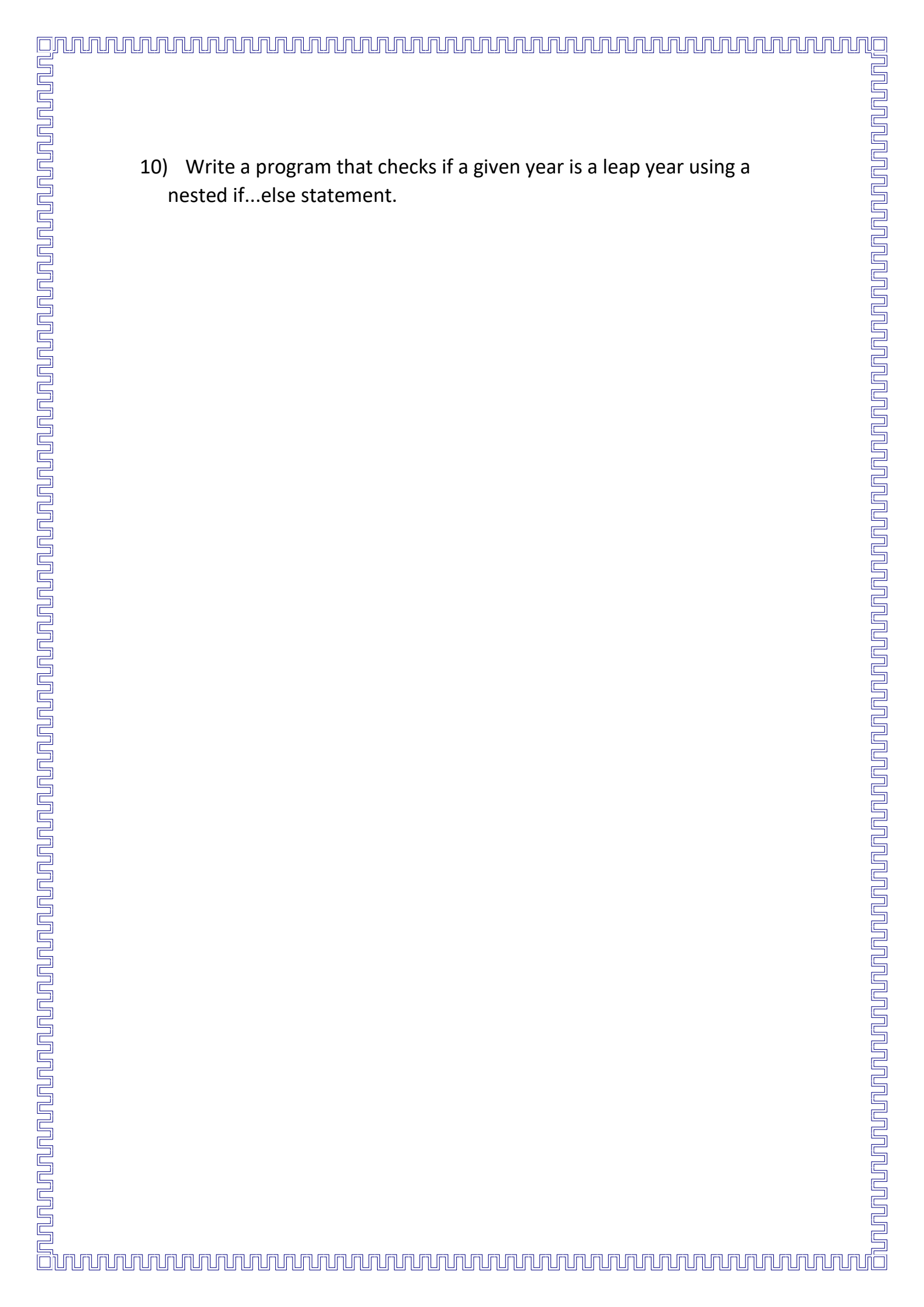
1) Write a program that checks if a given number is positive, negative, or zero.

2) Write a program that checks if a given year is a leap year or not.

3) Write a program that checks if a given string is a palindrome (reads the same backwards as forwards) or not.

4) Write a program that finds the largest number among three given numbers.

5) Write a program that calculates the average of three given numbers.

6) Write a program that checks if a given number is prime or not.

7) Write a program that checks if a given string is a valid email address or not.

8) Write a program that converts a given temperature in Celsius to Fahrenheit.

9) Write a program that converts a given temperature in Fahrenheit to Celsius.

10) Write a program that checks if a given year is a leap year using a nested if...else statement.

Exercises and solution

1) Write a program that checks if a given number is positive, negative, or zero.

```
$number = -5;
if ($number > 0) {
    echo "The number is positive";
} elseif ($number < 0) {
    echo "The number is negative";
} else {
    echo "The number is zero";
}
```

2) Write a program that checks if a given year is a leap year or not.

```
$year = 2024;
if ($year % 4 == 0 && $year % 100 != 0 || $year % 400 == 0)
{
    echo "$year is a leap year";
} else {
    echo "$year is not a leap year";
}
```

3) Write a program that checks if a given string is a palindrome (reads the same backwards as forwards) or not.

```
$string = "racecar";
if (strrev($string) == $string) {
    echo "$string is a palindrome";
} else {
    echo "$string is not a palindrome"; }
```

4) Write a program that finds the largest number among three given numbers.

```php
$num1 = 10;
$num2 = 15;
$num3 = 5;
if ($num1 > $num2 && $num1 > $num3) {
    echo "$num1 is the largest number";
} elseif ($num2 > $num1 && $num2 > $num3) {
    echo "$num2 is the largest number";
} else {
    echo "$num3 is the largest number";
}
```

5) Write a program that calculates the average of three given numbers.

```php
$num1 = 10;
$num2 = 15;
$num3 = 5;
$average = ($num1 + $num2 + $num3) / 3;
echo "The average of $num1, $num2, and $num3 is $average";
```

6) Write a program that checks if a given number is prime or not.

```php
$number = 7;
$is_prime = true;
for ($i = 2; $i < $number; $i++) {
    if ($number % $i == 0) {
        $is_prime = false;
        break;
    }
}
if ($is_prime) {
```

```php
        echo "$number is a prime number";
    } else {
        echo "$number is not a prime number";
    }
```

7) Write a program that checks if a given string is a valid email address or not.

```php
    $email = "example@domain.com";
    if (filter_var($email, FILTER_VALIDATE_EMAIL)) {
        echo "$email is a valid email address";
    } else {
        echo "$email is not a valid email address";
    }
```

8) Write a program that converts a given temperature in Celsius to Fahrenheit.

```php
    $celsius = 25;
    $fahrenheit = ($celsius * 9/5) + 32;
    echo "$celsius degrees Celsius is $fahrenheit degrees
    Fahrenheit";
```

9) Write a program that converts a given temperature in Fahrenheit to Celsius.

```php
    $fahrenheit = 77;
    $celsius = ($fahrenheit - 32) * 5/9;
    echo "$fahrenheit degrees Fahrenheit is $celsius degrees
    Celsius";
```

10)   Write a program that checks if a given year is a leap year using a nested if...else statement.

```php
    $year = 2024;
    if ($year % 4 == 0) {
        if ($year % 100 == 0) {
```

```php
        if ($year % 400 == 0) {
            echo "$year is a leap year";
        } else {
            echo "$year is not a leap year";
        }
    } else {
        echo "$year is a leap year";
    }
} else {
    echo "$year is not a leap year";
}
```