

Objectives

- Create a Java program in an IDE
- Use programming fundamentals to solve problems

Task 1

Create a new project in your IDE/editor and download the lab starter file (**Main.java**) from the public folder <https://cs.unh.edu/~cs416/public/3L>

Task 2

sleepIn

The parameter `weekday` is true if it is a weekday, and the parameter `vacation` is true if we are on vacation. We sleep in if it is not a weekday or we're on vacation. Return true if we sleep in.

```
sleepIn(false, false) → true  
sleepIn(true, false) → false  
sleepIn(false, true) → true
```

Task 3

nearHundred

Given an int `n`, return true if it is within 10 of 100 or 200.

```
nearHundred(93) → true  
nearHundred(90) → true  
nearHundred(89) → false
```

Task 4

sameFirstLast

Given an array of ints, return true if the array is length 1 or more, and the first element and the last element are equal.

```
sameFirstLast([1, 2, 3]) → false  
sameFirstLast([1, 2, 3, 1]) → true  
sameFirstLast([1, 2, 1]) → true
```

Task 5

no23

Given an int array length 2, return true if it does not contain a 2 or 3.

```
no23([4, 5]) → true  
no23([4, 2]) → false  
no23([3, 5]) → false
```

Task 6

helloName

Given a string name, e.g. "Bob", return a greeting of the form "Hello Bob!".

```
helloName("Bob") → "Hello Bob!"  
helloName("Alice") → "Hello Alice!"  
helloName("X") → "Hello X!"
```

Task 7

Submit `Main.java` to Gradescope and confirm it runs and passes the expected tests.