**LEARN JAVASCRIPT**

**Race Day**

Codecademy’s annual race is just around the corner! This year, we have a lot of participants. You have been hired to write a program that will register runners for the race and give them instructions on race day.

As a timeline, registration would look like this:

Here’s how our registration works. There are adult runners (over 18 years of age) and youth runners (under 18 years of age). They can register early or late. Runners are assigned a race number and start time based on their age and registration.

Race number:

* Early adults receive a race number at or above 1000.
* All others receive a number below 1000.

Start time:

* Adult registrants run at 9:30 am or 11:00 am.
  + Early adults run at 9:30 am.
  + Late adults run at 11:00 am.
* Youth registrants run at 12:30 pm (regardless of registration).

But we didn’t plan for runners that are exactly 18! We’ll handle that by the end of the project.

If you get stuck during this project or would like to see an experienced developer work through it, click “**Get Unstuck**“ to see a **project walkthrough video**.

**Tasks**

9/9 complete

Mark the tasks as complete by checking them off

**1.**

Race numbers are assigned randomly. We’ve provided the necessary code at the top of the file.

Check off this task after reading that line.

You can read the hint if you want to learn how it works!

Hint

Math.random() returns a value between 0 (inclusive) and 1 (exclusive).

In order to make this set of numbers range from 0 (inclusive) to 1000 (exclusive) we can multiply the returned value by 1000.

Finally, to ensure we only have whole numbers from 0 to 999 we can round down using Math.floor().

let raceNumber = Math.floor(Math.random() \* 1000);

**2.**

Create a variable that indicates whether a runner registered early or not.

Set it equal to a Boolean value. You’ll change this later as you test different runner conditions.

Hint

For example:

const registeredEarly = false;

**3.**

Create a variable for the runner’s age and set it equal to a number.

You’ll change this later as you test different runner conditions.

Hint

For example:

const age = 19;

**4.**

Create a control flow statement that checks whether the runner is an adult AND registered early.

Add 1000 to their raceNumber if this is true.

Hint

A runner is an adult if their age is over 18.

You’ll need to use an if statement, the && logical operator, and the mathematical assignment operator +=.

**5.**

Create a separate control flow statement below the first (starting with if again). This statement will check age and registration time to determine race time.

For runners over 18 who registered early, log a statement to the console telling them that they will race at 9:30 am. Include their raceNumber.

Hint

This step requires an if statement, the && logical operator, console.log, and string interpolation.

if (condition && condition) {  
  console.log('statement');  
}

**6.**

“Late adults run at 11:00 am”

Since we already checked for early adults we can write a statement like this: *else if runner is over 18 AND did not register early they will race at 11:00am*

Write the corresponding else if statement.

Within that, log a string to the console telling them that they will race at 11:00 am. Include their raceNumber.

Hint

This step requires an else if statement, the && and ! logical operators, console.log, and string interpolation.

if (condition && condition) {  
  console.log('statement');  
} else if (condition && !condition) {  
  console.log('other statement');  
}

**7.**

“Youth registrants run at 12:30 pm (regardless of registration)”

For people who are under 18, log a statement to the console telling them that they will race at 12:30 pm. Include their raceNumber.

Hint

if (condition && condition) {  
  console.log('statement');  
} else if (condition && !condition) {  
  console.log('other statement');  
} else if (condition) {  
  console.log('another statement');  
}

**8.**

Enter different combinations of values for the two variables you created and run your code several times. Verify that the correct statements are printing to the console!

You can check your work using the examples provided in the hint.

Hint

If your code is working correctly, all of these should be true:

Runners who are 25 years old and registered early will run at 9:30 am.

Runners who are 25 years old and did NOT register early will run at 11:00 am.

Runners who are 16 years old and registered early will run at 12:30 pm.

Runners who are 16 years old and did NOT register early will run at 12:30 pm.

**9.**

Don’t forget about runners exactly 18 years old!

Add an else statement that logs a statement to the console telling the runner to see the registration desk.

Hint

If your code is working correctly, this should be true:

Runners who are 18 years old and registered early should see the registration desk.

Runners who are 18 years old and did NOT register early should see the registration desk.

**Reminder: All the things in the main.js and Console have extra things added by and not the exact same thing the tasks ask you to do!**

Main.js:

console.log(`Codecademy's Annual Race`);

console.log(`Registeres Ticket`);

console.log(`--------------------------------------------`);

console.log(`This Imformation is for all registered early, late, and youth race. put your age where it says let = '' in the string (Replace it!), don't touch anything else that out the string, it can mess with our ticket system, if you do you will be fined!`);

console.log(`Fine: $3500`)

console.log(`--------------------------------------------`);

// Code Starts here:

let raceNumber = Math.floor(Math.random() \* 1000);

// The Code above is provided by Codecademy

let early = 'Early Race';

let late = 'Late Race';

let youth = 'Youth Race';

// This Imformation is for all registered early, late, and youth race. put your age where it says let = '' in the string (Replace it!), don't touch anything else that out the string, it can mess with our ticket system, if you do you will be fined! Fine: $3500;

//Registering: Place your age after the age = ' ';

let age = 18;

// This Imformation is for all registered early, late, and youth race. put your age where it says let = '' in the string (Replace it!), don't touch anything else that out the string, it can mess with our ticket system, if you do you will be fined! Fine: $3500;

// Comapny: You can switch anything in the string to 'late, Early, and Youth Race';

let race = 'late Race';

//Early Race Code:

if(race === 'Early Race' && age > 18){

  raceNumber += 1000;

}

if(race === 'Early Race' && age > 18){

  console.log(`You will be the part of the ` + race + `, your age is ` + age + '.');

}

if(race === 'Early Race' && age > 18){

  console.log(`Race will being at 9:30, your race number is ${raceNumber}.`);

}

//Late Race Code:

if(race === 'Late Race' && age > 18){

  raceNumber += 1000;

}

if(race === 'Late Race' && age > 18){

  console.log(`You will be the part of the ` + race + `, your age is ` + age + `.`);

}

if(race === 'Late Race'  && age > 18){

  console.log(`Race will being at 11:00, your race number is ${raceNumber}.`);

}

//Youth Race Code:

if(race === 'Youth Race' && age < 18){

  raceNumber < 1000;

}

if(race === 'Youth Race' && age < 18){

  console.log(`You will be the part of the ` + race + `, your age is ` + age + `.`);

}

if(race === 'Youth Race' && age < 18){

  console.log(`Race will being at 12:30, your race number is, ${raceNumber}.`);

}

// Age = 18 Solution:

if(age === 18){

  console.log('Information: We do not know if you are part of the Youth or the Late and early race because your age is exactly 18.');

}

if(age === 18){

  console.log('Please approach the registration desk, thanks!');

}

// Reminder Code:

console.log(`--------------------------------------------`);

console.log(`Reminder: Do not lose your ticket at all cost, you will have to buy a new one if you lose this.`);

Console:

Codecademy's Annual Race

Registeres Ticket

--------------------------------------------

This Imformation is for all registered early, late, and youth race. put your age where it says let = '' in the string (Replace it!), don't touch anything else that out the string, it can mess with our ticket system, if you do you will be fined!

Fine: $3500

--------------------------------------------

Information: We do not know if you are part of the Youth or the Late and early race because your age is exactly 18.

Please approach the registration desk, thanks!

--------------------------------------------

Reminder: Do not lose your ticket at all cost, you will have to buy a new one if you lose this.