02.02 Lab Solution

1. Write a nested if-else block, that satisfies the following conditions:

2. Write a nested if-else block, that satisfies the following conditions:

    - If the student score is greater than or equal to 90, if the student is in high school, they get a grade of "A", but if they are in college they get a grade of 4.
    - If the student score is greater than or equal to 80 and less than 90, if the student is in high school, they get a grade of "B", but if they are in college they get a grade of 3.
    - If the student score is greater than or equal to 70 and less than 80, if the student is in high school, they get a grade of "C", but if they are in college they get a grade of 2.
    - If the student score is greater than or equal to 65 and less than 70, if the student is in high school, they get a grade of "D", but if they are in college they get a grade of 1.
    - Else the grade is "FAIL" for both high school and college.

```
let score = 94;
let highSchool = true;
let grade;

if(score >= 90) {
    if(highSchool) {
        grade = "A";
    } else {
        grade = 4;
    }
} else if(score >= 80) {
    if(highSchool) {
        grade = "B";
    } else {
        grade = 3;
    }
} else if(score >= 70) {
    if(highSchool) {
        grade = "C";
    } else {
        grade = 2;
    }
} else {
    grade = "FAIL";
}

console.log(grade);
```

3. Write a nested if-else block, that calculates the price of a bet, based on the following conditions:

    - If the pet is a cat, increase the pet price by 20%, unless it is a kitten (baby cat), in which case decrease the price by 10%.

- If the pet is a dog, increase the pet price by 30%, unless it is a puppy (baby dog), in which case decrease the price by 15%.
- If the pet is anything besides a dog or a cat, double the price, unless it is a baby version of the pet, in which case cut the price in half.

```
let pet = "cat";
let price = 100;
let baby = true;

if(pet == "cat") {
    if(baby) {
        price *= 0.9; // to decrease by 10%, multiply by 0.9
    } else {
        price *= 1.2; // to increase by 20%, multiply by 1.2
    }
} else if(pet == "dog") {
    if(baby) {
        price *= 0.85; // to decrease by 15%, multiply by 0.85
    } else {
        price *= 1.3; // to increase by 30%, multiply by 1.3
    }
} else {
    if(baby) {
        price *= 0.5; // to decrease by half (50%), multiply by 0.5
    } else {
        price *= 2; // to double a number, multiply it by 2
    }
}

console.log(price);
```