

02.02 Lab Solution

1. 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.

```
let studentScore = 94;
let isHighSchool = true;
let grade;

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

console.log(grade);
```

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

- If the pet is a cat, increase the pet price by 20%, unless it is a 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 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 = false;

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

console.log(price);
```

- **END Lab 02.02**
- **SEE Lab 02.02 Solution**