

Conditional Exercises

These exercises will provide some practice using conditionals and comparison operators.

1. Temperature Classifier:

Create a function that takes an input a temperature and uses conditional statements to classify it as hot, warm, or cold. Based on the temperature, return a string of "hot", "warm," or "cold". Experiment with different temperature ranges. **Example:**

```
tempCheck(75); //Returns warm
```

2. Grades Calculator:

Create a function that take a numerical grade and uses if-else statements to determine the corresponding letter grade ("A", "B", "C", "D", or "F"). **Example:**

```
grade(95); //Returns A
```

3. Traffic Light Simulator:

Write a function that simulates a traffic light using a switch statement. Based on the input ("red", "yellow", "green"), return the corresponding action ("stop", "prepare to stop", "go"). **Example:**

```
trafficLight("green"); //Returns "go"
```

4. Number Analyzer:

Write a function that takes a number and uses if-else statements to determine if it's "positive", "negative", or "zero". Experiment with different scenarios, including non-numeric input. **Example:**

```
classifyNumber(7); //Returns "Positive"  
classifyNumber("Carl"); //Returns "Invalid input. Please provide a valid number"
```

5. Calendar Function:

Create a function that takes a numerical month (1 for January, 2 for February, etc.) and uses a conditional to display the number of days in that month. Test your function with various inputs to ensure accurate results.

Example:

```
numberOfDays(4); //Returns "30 days"
```

Stretch Question:

Write a function that takes a number and returns "multiple of three" for any number that is a multiple of 3, "multiple of five" for any number that is a multiple of 5 and "multiple of three and five" for any number that is a multiple of 3 and 5. Otherwise return the number. **Example:**

```
multiples(45); //Returns multiple of three and five  
multiples(9); // Returns multiple of three  
multiples(20); // Returns multiple of five  
multiples(7); // Returns 7
```