

```

package Conditions;
//Challenge: Check if a number is even and divisible by 5.
public class Challenge1 {
    public static void main(String[] args) {
        int n = 5;
        if(n%2==0) {
            System.out.println("The number is even.");
        }
        else {
            System.out.println("The number is odd.");
        }
        if(n%5==0) {
            System.out.println("The number is divisible by 5.");
        }
        else {
            System.out.println("The number is not divisible by 5.");
        }
    }
}

```

```

package Conditions;
//Challenge: Validate a triangle (sum of angles = 180).
public class Challenge2 {
    public static void main(String[] args) {
        int angle1 = 60, angle2 = 60, angle3 = 60;
        if ((angle1 + angle2 + angle3) == 180) {
            System.out.println("Valid triangle");
        } else {
            System.out.println("Invalid triangle");
        }
    }
}

```

```

package Conditions;
import java.util.Scanner;
//Challenge: Check if year is a leap year.
public class Challenge3 {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter a year: ");
        int year = sc.nextInt();
        if ((year % 4 == 0 && year % 100 != 0) || (year % 400 == 0)) {
            System.out.println(year + " is a Leap Year");
        } else {
            System.out.println(year + " is not a Leap Year");
        }
        sc.close();
    }
}

```

```

package Conditions;
import java.util.Scanner;
//Challenge: Check character type (vowel/consonant/digit/special).
public class Challenge4 {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter a character: ");
        char ch = sc.next().charAt(0);
        if (Character.isLetter(ch)) {
            char c = Character.toLowerCase(ch);
            if (c == 'a' || c == 'e' || c == 'i' || c == 'o' || c == 'u') {
                System.out.println("The type of character is: Vowel.");
            } else {
                System.out.println("The type of character is: Consonant.");
            }
        } else if (Character.isDigit(ch)) {
            System.out.println("The type of character is: Digit.");
        } else {
            System.out.println("The type of character is: Special Character.");
        }
        sc.close();
    }
}

```

```

package Conditions;
import java.util.Scanner;
//Challenge: Check eligibility for vote, driving, and job using conditions
public class Challenge5 {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter your age: ");
        int age = sc.nextInt();
        if (age >= 18) {
            System.out.println("You are eligible to Vote and for driving licence.");
            if (age >= 21) {
                System.out.println("You are not eligible for Job.");
            }
            else {
                System.out.println("You are not eligible for job");
            }
        }
        else {
            System.out.println("You are not eligible to Vote, for driving license and for job.");
        }
        sc.close();
    }
}

```