```java
package FlowControl;
//Challenge: Use if-else to determine if a number is positive, negative, or zero.
public class Challenge1 {
	public static void main(String[] args) {
		int n = 4;
		if(n==0)
			System.out.println("Given number is Zero.");
		else if(n>0)
			System.out.println("Given number is positive");
		else
			System.out.println("Negative");
	}
}
```

```java
package FlowControl;
//Challenge: Implement nested if to find the largest among 3 numbers
public class Challenge2 {
	public static void main(String[] args) {
		int a=1, b=5,c=9;
		if(a>b){
			if(a>c) {
				System.out.println("a is the largest number: "+a);
			}
			else {
				System.out.println("c is the largest number: "+c);
			}
		}
		else {
			if(b>c) {
				System.out.println("b is the largest number: "+b);
			}
			else {
				System.out.println("c is the largest number: "+c);
			}
		}
	}
}
```

```java
package FlowControl;
import java.util.Scanner;
//Challenge: Validate login with username and password.
public class Challenge3 {
	public static void main(String[] args) {
		Scanner sc = new Scanner(System.in);
      String username = "admin";
      String password = "admin123";
      System.out.print("Enter username: ");
```

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        String u = sc.nextLine();
        System.out.print("Enter password: ");
        String p = sc.nextLine();
        if (u.equals(username) && p.equals(password)) {
            System.out.println("Login successful!");
        } else {
            System.out.println("Invalid credentials.");
        }
        sc.close();
            }
}


package FlowControl;
import java.util.Scanner;
//Challenge: Categorize age groups using if-else ladder.
public class Challenge4 {
        public static void main(String[] args) {
                Scanner sc = new Scanner(System.in);
                System.out.print("Enter your age: ");
                int age = sc.nextInt();

                if(age>0 && age<=17) {
                        System.out.println("Child");
                }
                else if(age>17 && age<20) {
                        System.out.println("Teen");
                }
                else if(age>20 && age<60) {
                        System.out.println("Adult");
                }
                else {
                        System.out.println("Old");
                }
                sc.close();
        }
}


package FlowControl;
import java.util.Scanner;
//Challenge: Determine student grade using percentage.
public class Challenge5 {
        public static void main(String[] args) {
                Scanner sc = new Scanner(System.in);
                System.out.print("Enter your percentage: ");
                int percentage = sc.nextInt();

                if(percentage<=100 && percentage>90) {
```

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                System.out.println("A+");
            }
            else if(percentage>80 && percentage<=90) {
                System.out.println("A");
            }
            else if(percentage>70 && percentage<=80) {
                System.out.println("B");
            }
            else if(percentage>60 && percentage<=70){
                System.out.println("C");
            }
            else{
                System.out.println("Fail");
            }
            sc.close();
        }
}
```