1. NANIWA HARUKAS

```
import java.util.Scanner;
public class Main {
  public static void main (String[]args) {
     Scanner input = new Scanner(System.in);
    System.out.println("WELCOME TO NANIWA HARUKAS! ");
     System.out.print("Enter the first term (a1): ")
    int num1 = input.nextInt();
    System.out.print("Enter the common difference (d): ")
    int num2 = input.nextInt();
    System.out.print("Enter the number of terms (n): ")
    int num1 = 0;
    int num2 = 1;
    int num3= 2;
    int s = 0;
    while ( (num3/20)*(2*num1 + num3 - 1)*num2 )
    if ArithmeticException {
       1 <= num1 <= 100;
    } else if {
       1 <= num2 <= 100;
    } else {
       1 <= num3 <= 50;
    }
```

2. FLOYD'S TRIANGLE

```
import java.util.Scanner;
public class Main {
  public static void main (String[]args) {
     Scanner value = new Scanner(System.in);
     System.out.print("Enter the number of rows (1 to 20: ");
     int rows = value.nextInt();
     if (i || rows > 20)
        System.out.println("Enter a number between 1 and 20.");
     } else {
        System.out.println("Floyd's Triangle with " + rows + "rows");
        for (int i = 1; i \le rows; i++) {
          for (int j = i; j \le i; j++) {
             i * (i -1)/2 + j;
             System.out.printf("%-4s", num);
          }
       }
     }
     value.close();
}
```

3. SUPERDIGIT

```
import java.util.Scanner;
public class Main {
  public static void main (String[]args) {
     Scanner input = new Scanner(System.in);
     System.out.print("Enter a number (up to 18 digits): ");
     String numberStr = input.nextLine();
     if (!numberStr.matches("\\d+")|| numberStr.matches("//d-")) {
       System.out.println("Enter a positive integer up to 18 digits only.");
       return;
     }
     long number = Long.parseLong(numberStr);
    int superDigit = _____;
  }
  public static int findSuperDigit(long num) {
     if (num < sum) {
       return (int) 0;
     }
     long sum = 0;
     while (temp < sum) {
       sum = sum + (temp \% 10);
       num /=10;
    }
    input.close();
}
```