```
Answer 1)
// Online Java Compiler
// Use this editor to write, compile and run your Java code online
import java.util.HashMap;
import java.util.Map;
public class HelloWorld {
  public static boolean isIsomorphic(String s, String t) {
     if (s.length() != t.length())
       return false;
     Map<Character, Character> sToT = new HashMap<>();
     Map<Character, Character> tToS = new HashMap<>();
     for (int i = 0; i < s.length(); i++) {
       char sChar = s.charAt(i);
       char tChar = t.charAt(i);
       if (!sToT.containsKey(sChar) && !tToS.containsKey(tChar)) {
          sToT.put(sChar, tChar);
          tToS.put(tChar, sChar);
       } else if (sToT.containsKey(sChar) && tToS.containsKey(tChar)) {
          if (sToT.get(sChar) != tChar || tToS.get(tChar) != sChar)
             return false;
       } else {
          return false;
       }
     return true;
  }
  public static void main(String[] args) {
     String s = "egg";
     String t = "add";
     System.out.println(isIsomorphic(s, t)); // Output: true
  }
}
```

```
// Online Java Compiler
// Use this editor to write, compile and run your Java code online
public class HelloWorld {
  public static boolean isStrobogrammatic(String num) {
     int left = 0;
     int right = num.length() - 1;
     while (left <= right) {
        char leftChar = num.charAt(left);
        char rightChar = num.charAt(right);
        if (!isStrobogrammaticPair(leftChar, rightChar))
          return false;
        left++;
        right--;
     }
     return true;
  }
  private static boolean isStrobogrammaticPair(char c1, char c2) {
     switch (c1) {
        case '0':
          return c2 == '0';
        case '1':
          return c2 == '1';
        case '6':
          return c2 == '9';
        case '8':
          return c2 == '8';
        case '9':
          return c2 == '6';
        default:
          return false;
     }
  }
  public static void main(String[] args) {
     String num = "69";
     System.out.println(isStrobogrammatic(num)); // Output: true
  }
}
```

```
Answer 3)
// Online Java Compiler
// Use this editor to write, compile and run your Java code online
public class HelloWorld {
  public static String addStrings(String num1, String num2) {
     StringBuilder sum = new StringBuilder();
     int carry = 0;
     int i = num1.length() - 1;
     int j = num2.length() - 1;
     while (i \geq 0 || j \geq 0 || carry \geq 0) {
        int digit1 = i \ge 0? num1.charAt(i) - '0' : 0;
        int digit2 = j \ge 0? num2.charAt(j) - '0' : 0;
        int currentSum = digit1 + digit2 + carry;
        carry = currentSum / 10;
        int digit = currentSum % 10;
        sum.insert(0, digit);
        i--;
       j--;
     return sum.toString();
  }
  public static void main(String[] args) {
     String num1 = "11";
     String num2 = "123";
     System.out.println(addStrings(num1, num2)); // Output: "134"
  }
}
Answer 4)
// Online Java Compiler
// Use this editor to write, compile and run your Java code online
public class HelloWorld {
  public static String reverseWords(String s) {
     String[] words = s.split(" ");
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StringBuilder result = new StringBuilder();
     for (String word : words) {
        StringBuilder reversedWord = new StringBuilder(word);
        reversedWord.reverse();
       result.append(reversedWord).append(" ");
     }
     result.deleteCharAt(result.length() - 1); // Remove the trailing whitespace
     return result.toString();
  }
  public static void main(String[] args) {
     String s = "Let's take LeetCode contest";
     System.out.println(reverseWords(s));
     // Output: "s'teL ekat edoCteeL tsetnoc"
  }
}
Answer 5)
// Online Java Compiler
// Use this editor to write, compile and run your Java code online
public class HelloWorld {
  public static String reverseStr(String s, int k) {
     char[] chars = s.toCharArray();
     for (int i = 0; i < chars.length; i += 2 * k) {
       int start = i;
        int end = Math.min(i + k - 1, chars.length - 1);
       while (start < end) {
          char temp = chars[start];
          chars[start] = chars[end];
          chars[end] = temp;
          start++;
          end--;
       }
     }
```

```
return String.valueOf(chars);
  }
  public static void main(String[] args) {
     String s = "abcdefg";
     int k = 2;
     System.out.println(reverseStr(s, k));
     // Output: "bacdfeg"
  }
}
Answer 6)
// Online Java Compiler
// Use this editor to write, compile and run your Java code online
public class HelloWorld {
  public static boolean canShift(String s, String goal) {
     if (s.length() != goal.length()) {
        return false;
     }
     String shifted = s;
     for (int i = 0; i < s.length(); i++) {
        if (shifted.equals(goal)) {
          return true;
        }
        shifted = shiftLeft(shifted);
     }
     return false;
  }
  private static String shiftLeft(String s) {
     return s.substring(1) + s.charAt(0);
  }
  public static void main(String[] args) {
     String s = "abcde";
     String goal = "cdeab";
     System.out.println(canShift(s, goal)); // Output: true
```

```
}
Answer 7)
// Online Java Compiler
// Use this editor to write, compile and run your Java code online
public class HelloWorld {
  public static boolean backspaceCompare(String s, String t) {
     return buildString(s).equals(buildString(t));
  }
  private static String buildString(String str) {
     StringBuilder result = new StringBuilder();
     for (char ch : str.toCharArray()) {
       if (ch == '#') {
          if (result.length() > 0) {
             result.deleteCharAt(result.length() - 1);
          }
       } else {
          result.append(ch);
       }
     }
     return result.toString();
  }
  public static void main(String[] args) {
     String s = "ab#c";
     String t = "ad#c";
     System.out.println(backspaceCompare(s, t)); // Output: true
  }
}
Answer 8)
// Online Java Compiler
// Use this editor to write, compile and run your Java code online
```

```
public class HelloWorld {
  public static boolean checkStraightLine(int[][] coordinates) {
     if (coordinates.length <= 2) {
        return true;
     }
     int x0 = coordinates[0][0];
     int y0 = coordinates[0][1];
     int x1 = coordinates[1][0];
     int y1 = coordinates[1][1];
     for (int i = 2; i < coordinates.length; i++) {
        int x = coordinates[i][0];
        int y = coordinates[i][1];
        if ((y1 - y0) * (x - x0) != (y - y0) * (x1 - x0)) {
           return false;
        }
     }
     return true;
  }
  public static void main(String[] args) {
     int[][] coordinates = \{\{1,2\},\{2,3\},\{3,4\},\{4,5\},\{5,6\},\{6,7\}\};
     System.out.println(checkStraightLine(coordinates)); // Output: true
  }
}
```