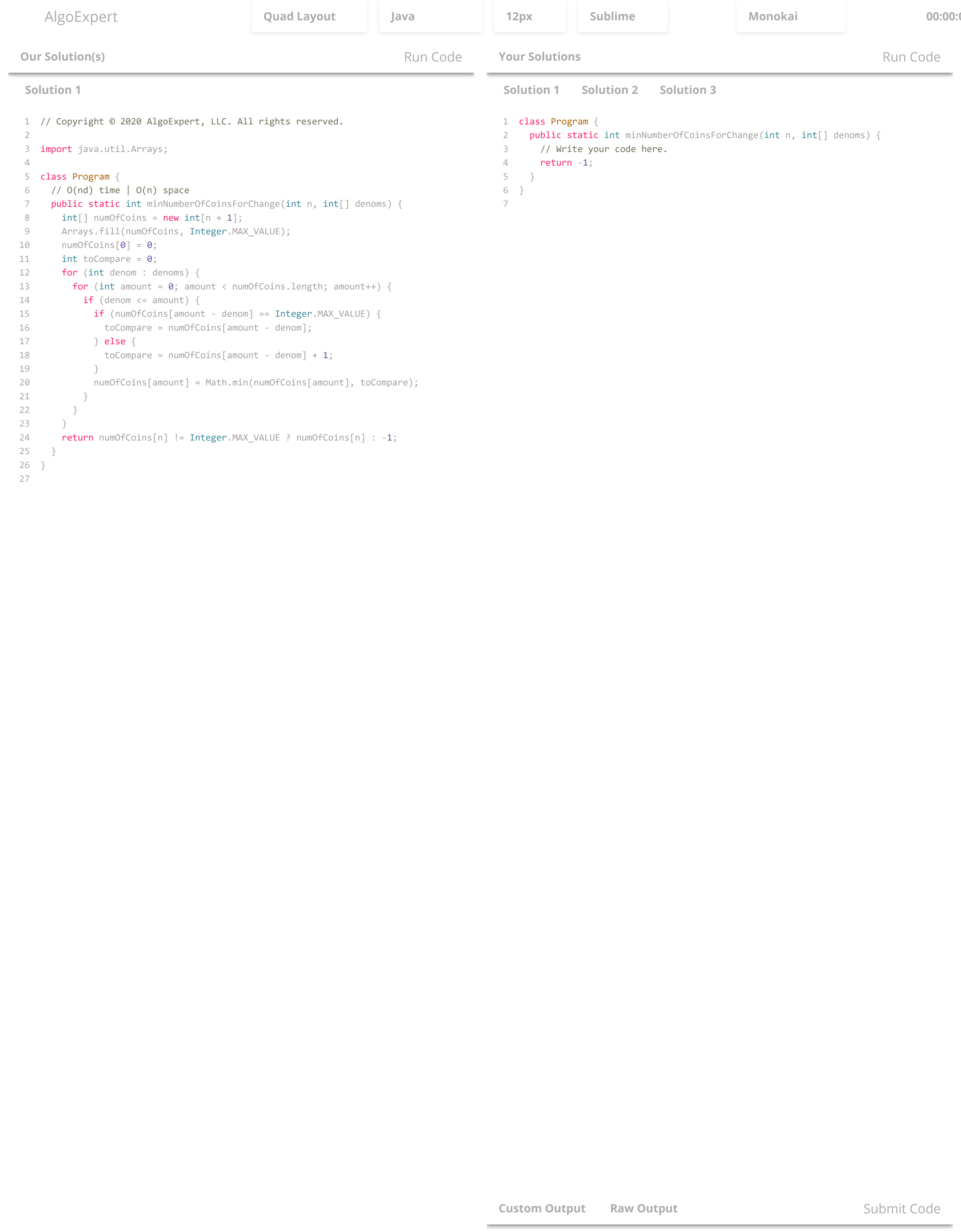

```java
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import java.util.Arrays;

class Program {
  // O(nd) time | O(n) space
  public static int minNumberOfCoinsForChange(int n, int[] denoms) {
    int[] numOfCoins = new int[n + 1];
    Arrays.fill(numOfCoins, Integer.MAX_VALUE);
    numOfCoins[0] = 0;
    int toCompare = 0;
    for (int denom : denoms) {
      for (int amount = 0; amount < numOfCoins.length; amount++) {
        if (denom <= amount) {
          if (numOfCoins[amount - denom] == Integer.MAX_VALUE) {
            toCompare = numOfCoins[amount - denom];
          } else {
            toCompare = numOfCoins[amount - denom] + 1;
          }
          numOfCoins[amount] = Math.min(numOfCoins[amount], toCompare);
        }
      }
    }
    return numOfCoins[n] != Integer.MAX_VALUE ? numOfCoins[n] : -1;
  }
}

```

```java
class Program {
  public static int minNumberOfCoinsForChange(int n, int[] denoms) {
    // Write your code here.
    return -1;
  }
}

```

Run or submit code when you're ready.